



**EQUITY IN A
CLEAN ENERGY
ECONOMY**

National Workshop Equity in a Clean Energy Economy

August 25th – 26th, 2023



COMMUNITY VOICES



What are your thoughts about climate change and solar/clean energy?



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National Equity Customer Survey Findings



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- ❑ Research focus areas:
 - Low-income customer issues
 - Next generation trends
 - Analysis and equitable transition to a clean energy economy



Voice of the Customer Survey: Equity Preferences

August 25, 2022



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ECEE Voice of the Customer Research:

*To pro-actively ask
customers in frontline
communities what their
priorities and preferences
are regarding equity in the
clean energy economy*

Background

Vocabulary used when talking about equity and clean energy can often be inconsistent. We also felt the need to understand better the priorities and preferences of frontline communities when it comes to making decisions that impact those communities.

In Q2 and Q3 2022, we conducted two surveys to gain a better understanding of equity from the customer's perspective and to test aspects of clean energy.

Two surveys were commissioned for this presentation

Survey 1 (May 2022)

Sample of all Americans of all income levels

Questions focused on understanding of certain terminology (i.e. equity, justice, etc.)

Survey 2 (July 2022)

Households making under \$50k/year polled

Questions focused mostly on community investment priorities through an energy lens



Survey Narrative

A growing number of Americans are struggling to pay utility bills and are increasingly concerned about their ability to pay in the upcoming months. Maintaining affordability is a social imperative. But can we maintain affordability, achieve greater equity and invest in clean energy?

Survey respondents, including low-income Americans, placed a high importance on all three objectives. However, there are conflicting viewpoints on whether clean energy will ultimately make utility bills less expensive or more expensive.

An important finding is how the respondents linked cleaner communities with healthier communities. This needs to be explored further.

Ultimately, it matters who you are talking to and where they live. African-Americans, for example, had a much higher degree of engagement on questions on equity or justice, concern over the future of their climate, and seeing the economic benefits of shifting to renewables.



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Survey Methodology and Notation



Research Methodology

The Russell Omnibus was conducted via the internet among 1,052 adults 18 years of age or older from May 20-23, 2022. Figures for gender, age, and geography were weighted where necessary to match their actual proportions in the population. The bases shown in this report are the unweighted bases.

An invitation to participate in the study was sent by e-mail to panel members who have agreed to be contacted by Russell Research and interviewed over the Internet.

- Participating respondents were interviewed online at a secure Russell Research URL programmed for this study.
- Sample was provided to Russell Research from a leading sample provider.

All research was carried out in compliance with all relevant legal and ethical requirements within the market and in compliance with ISO 20252:2019..



Statistical Analysis

The statistical significance of a result in this survey is the probability that the observed relationship (e.g., between variables) or a difference (e.g., between means) in a sample occurred by pure chance, and that in the population from which the sample was drawn, no such relationship or differences exist.

Using less technical terms, one could say that the statistical significance of a result tells us something about the degree to which the result is "true." More technically, the value of the p-value represents a decreasing index of the reliability of a result. The higher the p-value, the less we can believe that the observed relation between variables in the sample is a reliable indicator of the relation between the respective variables in the population.

Specifically, the p-value represents the probability of error that is involved in accepting our observed result as valid, that is, as "representative of the population." For example, a p-value of 0.05 (i.e., 1/20) indicates that there is a 5% probability that the relation between the variables found in our sample is a "fluke."

The following statistical notation is used throughout the report:



= Indicates figure is significantly higher than the other/indicated sub-group at a 95% confidence level

In theory, with probability samples of this size, one could say with 95 percent certainty that the results have a statistical precision of plus or minus 3.0 percentage points of what they would be if the entire adult population had been polled with complete accuracy. Unfortunately, there are several other possible sources of error in all polls or surveys that are probably more serious than theoretical calculations of sampling error. They include refusals to be interviewed (non-response), question wording and question order, and weighting. It is impossible to quantify the errors that may result from these factors. This online survey is not a probability sample.



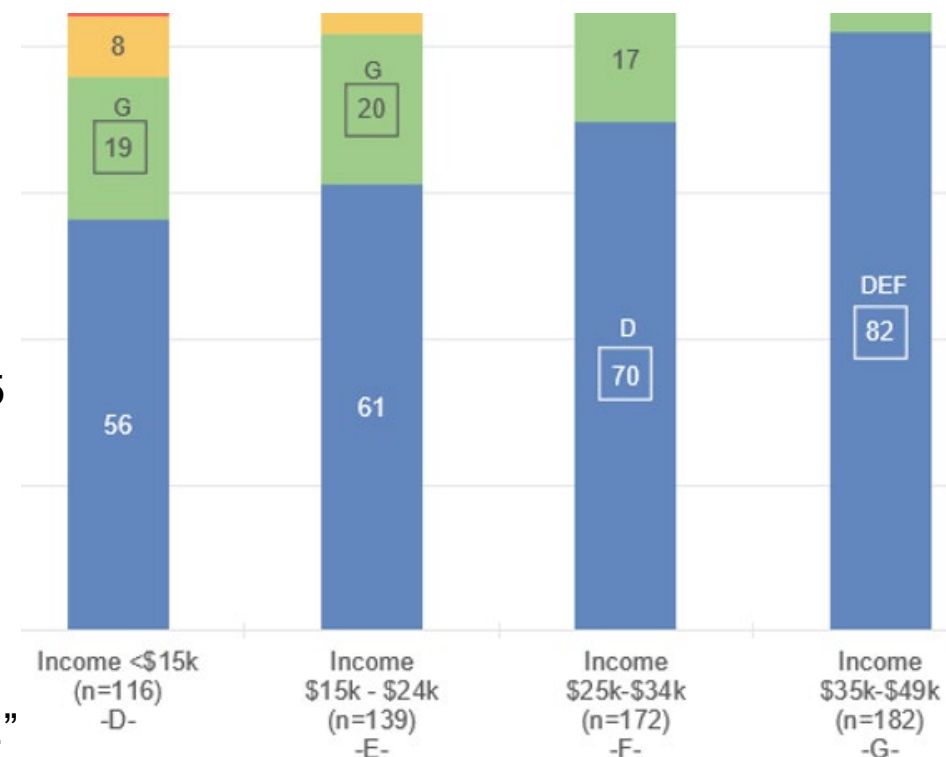
Statistical Significance

When is a difference between two numbers “statistically significant”?



= This symbol marks figures that are significantly higher than a related data point at the 95% confidence level.* The letter(s) above the box refer to the column(s) containing the data that are lower by a “statistically significant” amount. For example:

- The number “61” (61 percent) in the blue column “E” (without a box) is larger than “56” in column “D.” However, that difference (5 percentage points) is not statistically significant. It falls within the range of statistical precision (plus or minus some percentage points).
- In contrast, we can state with 95% confidence that the number “82” in in column “G” is significantly higher than each of the numbers (56, 61, and 70) in the columns marked “D,” “E,” and “F.”



“95% confidence level” means that a claim is expected to be false just once in twenty times

* Depending on the number of respondents, confidence levels may be calculated at the 95% level, the 90% level, or at some other level.

A Note About Racial and Ethnic Terminology

DEFG has asked Russell Research to display racial and ethnic categories. Russell Research uses the words “Caucasian,” “African American,” and “Hispanic” like the U.S. Census. The wording of Russell’s survey questions appears below. **What words would people prefer?** In a Gallup poll,* people of different backgrounds were asked what they prefer to be called. **Opinions varied, but there is no one answer.** We display the words used by Russell Research.

Black Americans' Preferred Term for Their Racial Subgroup

The terms "Black" and "African American" are both used to refer to this racial subgroup of Americans. Which term do you think should generally be used -- Black, African American, another term, or does it not matter to you either way?

	June 1-July 5, 2021
	%
Black	17
African American	17
Does not matter	58
Another term/Other	6
No opinion	2

GALLUP, JUN 1-JUL 5, 2021

Hispanic Americans' Preferred Term for Their Ethnic Subgroup

The terms "Hispanic," "Latino," and "Latinx" are used to refer to this ethnic subgroup of Americans. Which term do you think should generally be used -- Hispanic, Latino, LatinX, another term, or does it not matter to you either way?

	June 1-July 5, 2021
	%
Hispanic	23
Latino	15
Latinx	4
Does not matter	57
Another term/Other	1
No opinion	0

GALLUP, JUN 1-JUL 5, 2021

Russell Research Questions

Q. Are you of Hispanic origin or descent? (CHECK ONE)

- Yes
- No
- Rather not answer

Q. Do you consider yourself ... (CHECK ONE)

- African-American
- Asian/Pacific Islander
- Caucasian
- Native American
- Mixed ethnic background
- Other (Specify)
- Rather not answer

* Source: <https://news.gallup.com/poll/353000/no-preferred-racial-term-among-black-hispanic-adults.aspx>

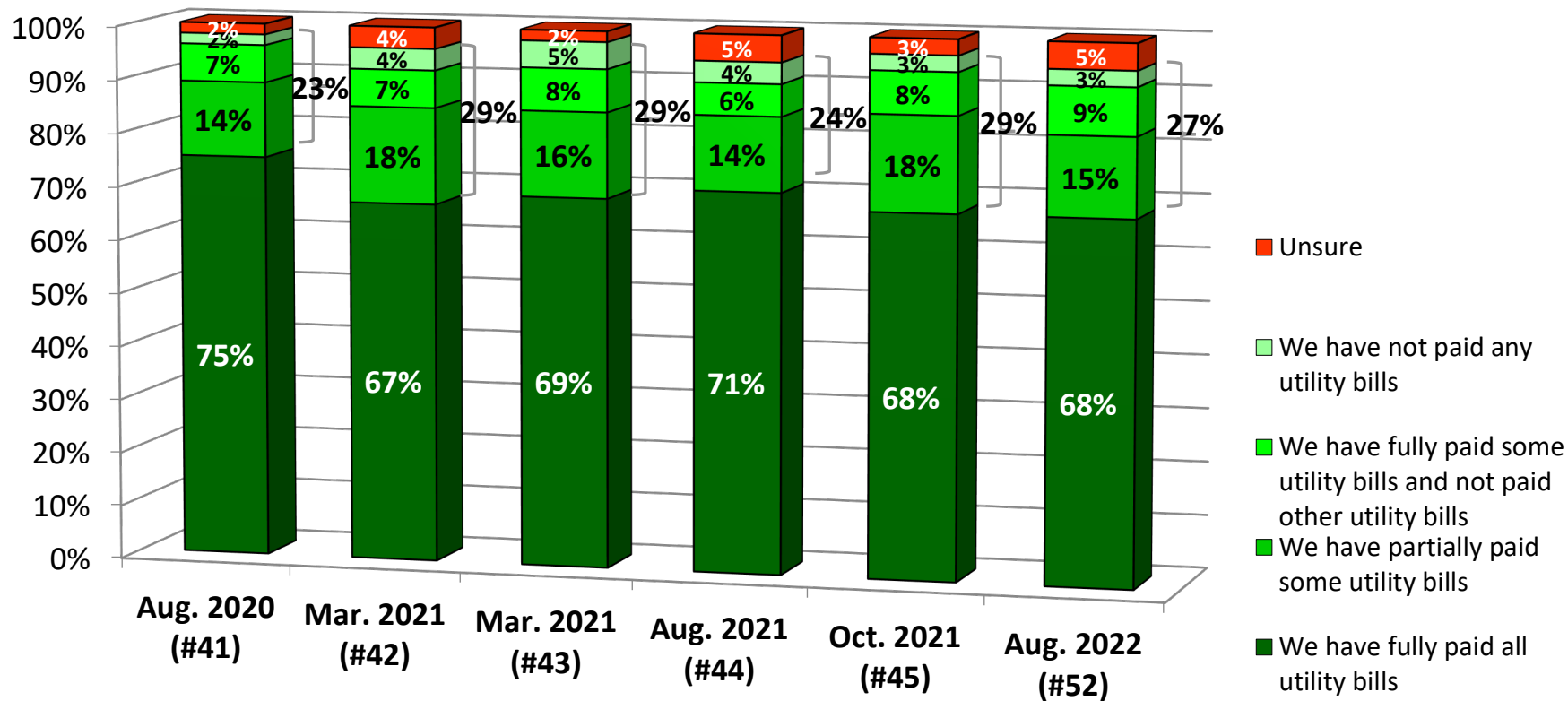


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Many Americans are Struggling and Vulnerable

Since 2020, Increasing Number of Customers Have Not Fully Paid Utility Bills

Degree to Which HHs Earning <\$50K Paid Utility Bills During Pandemic
 DEFG’s Low Income and Prepay Consumer Survey Reports, 2020-2022



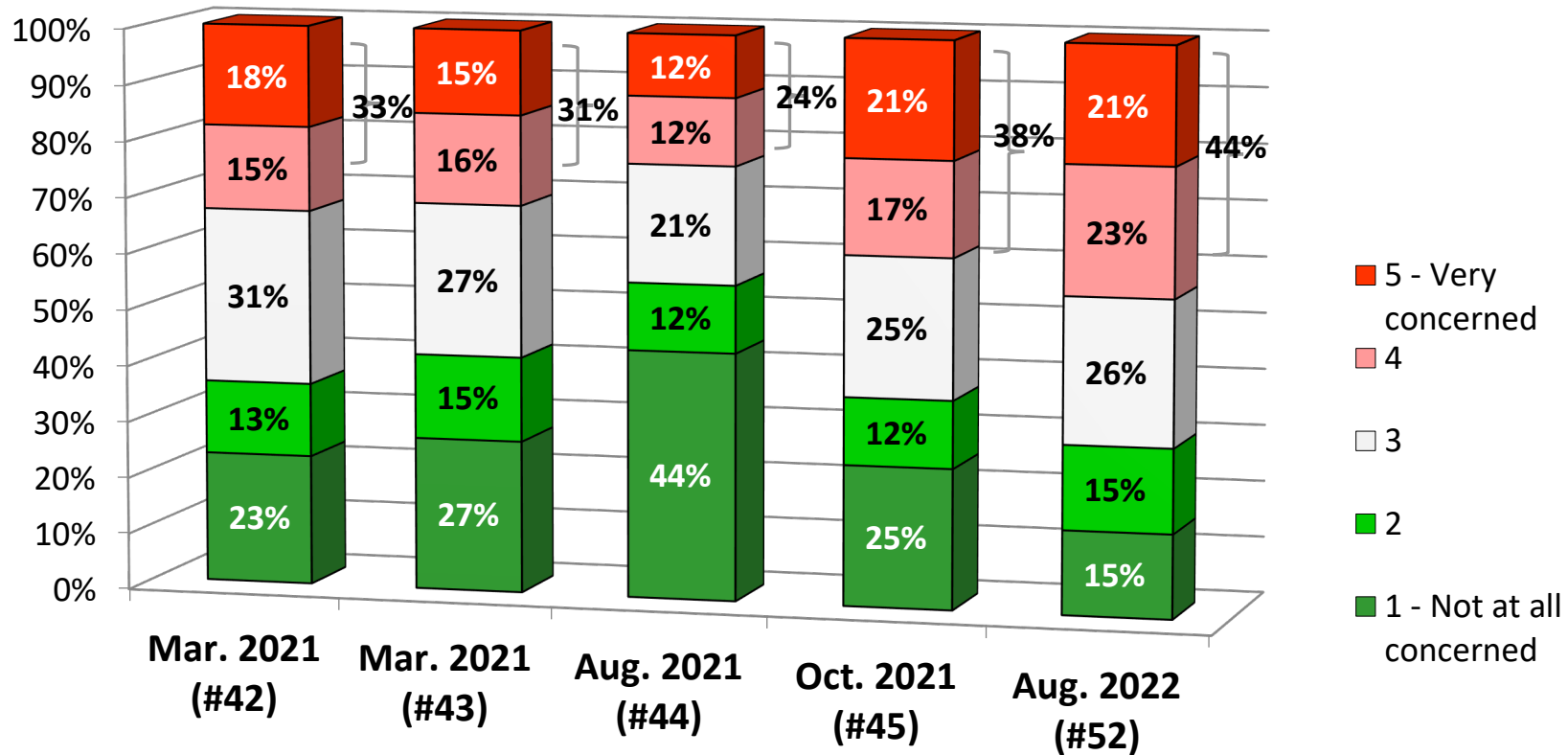
Source: Various DEFG Low Income and Prepay Consumer Survey Reports conducted by Russell Research in 2020 and 2021. Available on request. Question: “During the COVID-19 pandemic, nearly every electric, gas, and water utility has adopted a policy of not disconnecting customers who do not pay the utility bill (not shutting off utility service for non-payment). Which of the following best describes whether your household has paid utility bills during the COVID-19 pandemic?”

Concern About Utility Bills Higher Than COVID Peaks



Level of Concern Among HHs Earning <\$50K About Ability to Stay Current on Utility Bills Over Next 6 Months

DEFG's Low Income and Prepay Consumer Survey Reports, 2021-2022



Source: Various DEFG Low Income and Prepay Consumer Survey Reports conducted by Russell Research in 2020 and 2021. Available on request. Question: "How concerned are you about your household's ability to stay current on utility bill payments over the next six months?"



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Benefits of Clean Energy

Five Statements on Clean Energy Benefits Tested

- Clean energy will reduce local pollution and improve health outcomes
- Clean energy will reduce climate change and slow global warming
- Clean energy will create good-paying jobs and help economic growth
- Clean energy will reduce energy costs and utility bills
- Clean energy will help the U.S. lead and compete in the international economy

More Than 7 in 10 Americans “Agree Somewhat” or “Completely” that “Clean Energy Reduces Local Pollution and Improves Health”

	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Clean energy will reduce local pollution and improve health outcomes	72	74	71	73	64	74 ^D	76 ^D	76 ^D
Clean energy will reduce climate change and slow global warming	66	69	66	63	61	70 ^D	67	70 ^D
Clean energy will create good-paying jobs and help economic growth	62	67 ^C	61	57	59	58	62	71 ^{DE}
Clean energy will reduce energy costs and utility bills	57	64 ^C	60 ^C	47	58	59	53	60
Clean energy will help the U.S. lead and compete in the international economy	57	60	54	56	52	57	55	66 ^{DF}

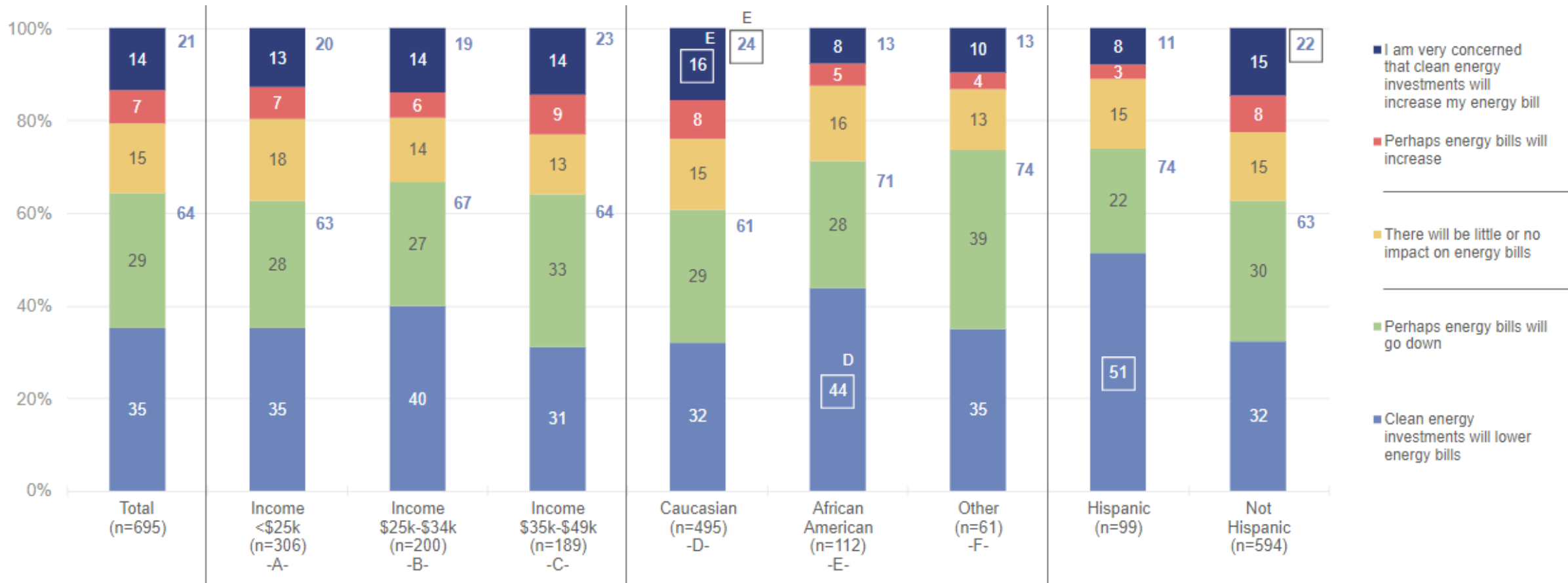
C6. Please indicate how much you agree or disagree with each of the following statements. (Choices: Disagree Completely, Disagree Somewhat, Neither Agree nor Disagree, Agree Somewhat, Agree Completely. Top 2 displayed here.)

Higher-income Americans (prior slide) and African Americans Are More Likely to Agree with Many of these Five Statements

	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Clean energy will reduce local pollution and improve health outcomes	72	71	74	82 ^H	75	72	78 ^O	75 ^O	60
Clean energy will reduce climate change and slow global warming	66	64	75 ^H	71	67	66	72 ^O	68 ^O	55
Clean energy will create good-paying jobs and help economic growth	62	60	75 ^H	65	58	63	69 ^O	63 ^O	50
Clean energy will reduce energy costs and utility bills	57	54	75 ^{HJ}	56	63	57	69 ^{NO}	54	49
Clean energy will help the U.S. lead and compete in the international economy	57	55	67 ^{HJ}	54	58	57	64 ^O	59 ^O	44

C6. Please indicate how much you agree or disagree with each of the following statements. (Choices: Disagree Completely, Disagree Somewhat, Neither Agree nor Disagree, Agree Somewhat, Agree Completely. Top 2 displayed here.)

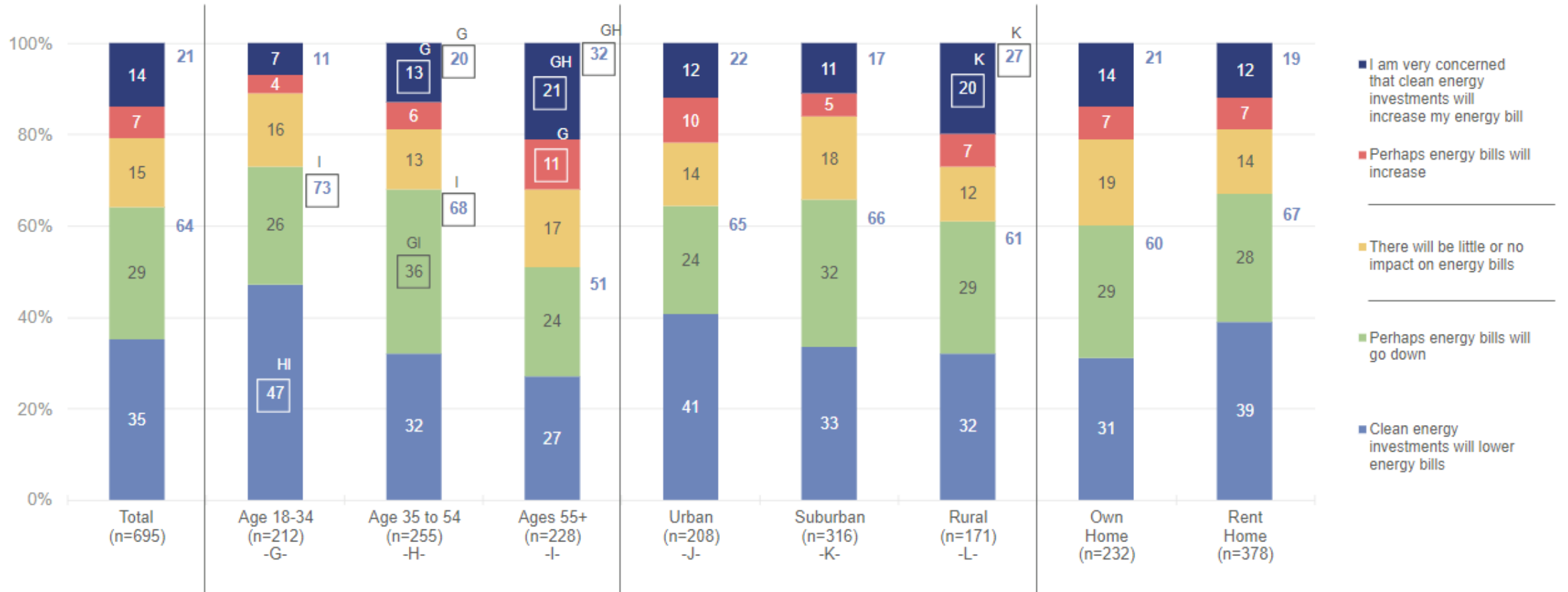
Perceptions of Clean Energy and Utility Bills



Base: Total Respondents

H1. Do you believe that utility investments in clean energy will benefit you and your family by making your energy bills more affordable?

Perceptions of Clean Energy and Utility Bills (Cont'd.)

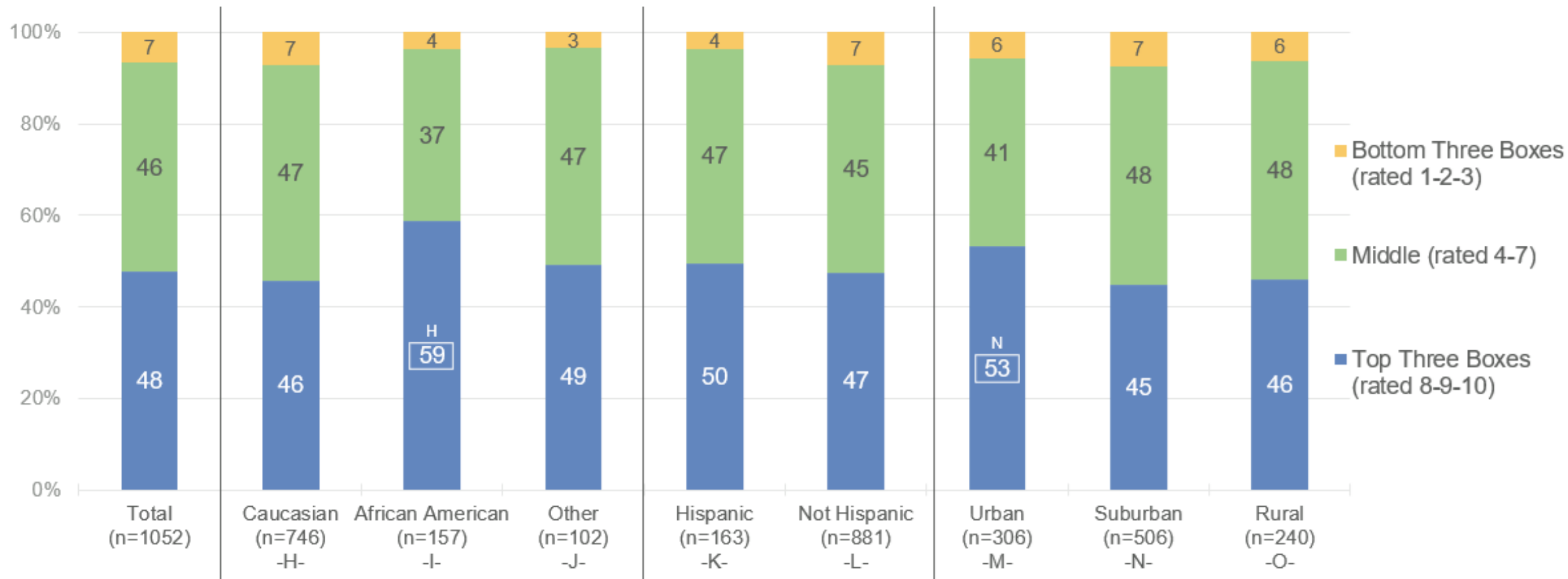


Base: Total Respondents

H1. Do you believe that utility investments in clean energy will benefit you and your family by making your energy bills more affordable?

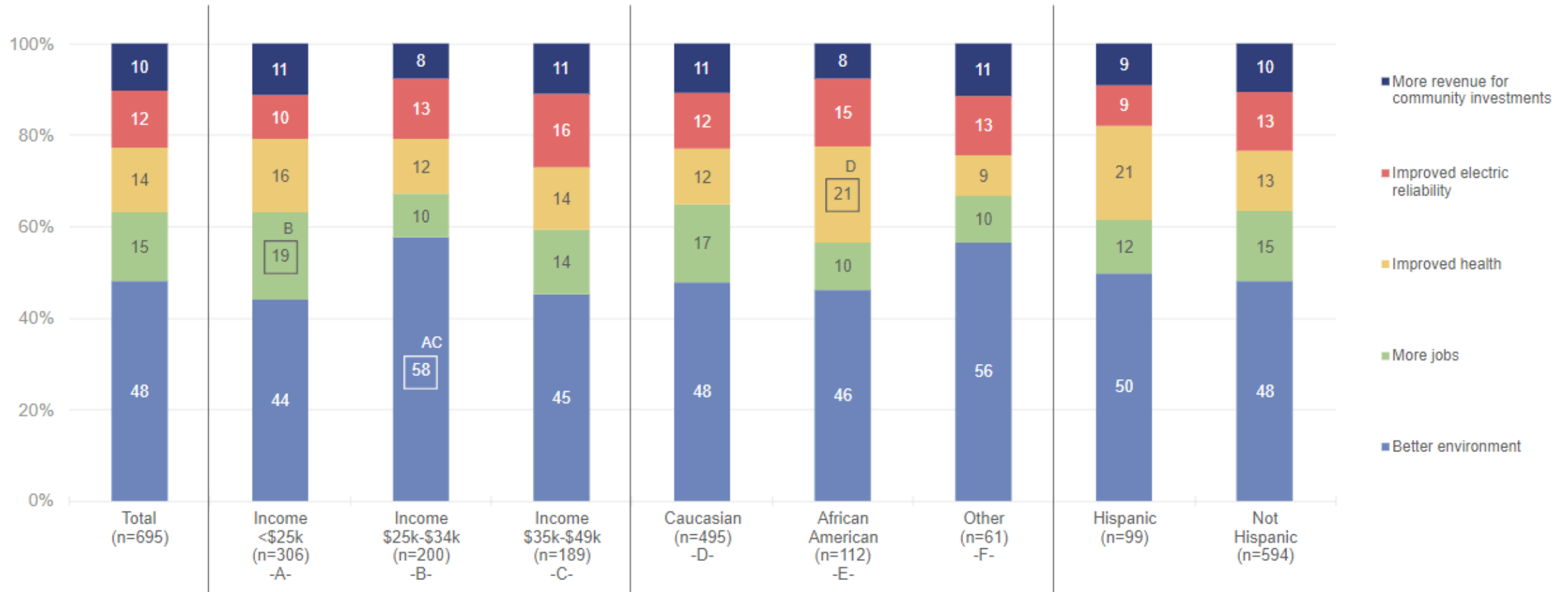
Half Are Concerned About Cost Shifting Onto Utility Bills

African Americans and urban dwellers had highest levels of concern



Base: Total Respondents C12. How concerned are you that costs are being shifted onto your utility bill to invest in and maintain infrastructure to support renewable energy and electric vehicles? (Scale of 1 to 10.)

Top Benefit To Community From Clean Energy Investments



Base: Total Respondents

H2. What do you think will be the top benefit your community will gain from clean energy investments?

Top 2 Priorities for Local Community

		Income			Race			Ethnicity	
	Total	Under \$25k -A-	\$25k - \$34k -B-	\$35k - \$49k -C-	Caucasian -D-	African American -E-	Other -F-	Hispanic	Not Hispanic
Total Respondents	(695)	(306)	(200)	(189)	(495)	(112)	(61)	(99)	(594)
	%	%	%	%	%	%	%	%	%
Food and groceries	43	45	40	45	45	38	42	32	45
Air and water quality	41	35	48 ^A	44	41	31	58 ^{DE}	42	41
Health services	38	40	40	32	36	44	42	44	37
Jobs	37	36	35	41	37	47 ^F	27	39	37
Policing and safety	31	31	29	33	33	28	22	35	31
Public transportation	9	12 ^C	8	5	8	11	9	8	9

H6. From your perspective, what should the priorities of your local community be? Pick your top two priorities.



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Statements on Fairness of Clean Energy Investments

Four Statements on Fairness Tested

- Fairness requires inclusion of everyone in project decision making
- Fairness requires tradeoffs between people today and people in future generations
- Fairness requires distributing today's project benefits and burdens to everyone
- Fairness requires considering past burdens to distribute today's benefits

Nearly 7 in 10 Americans “Agree Somewhat” or “Completely” that “Fairness Requires Inclusion of Everyone in Decision Making”

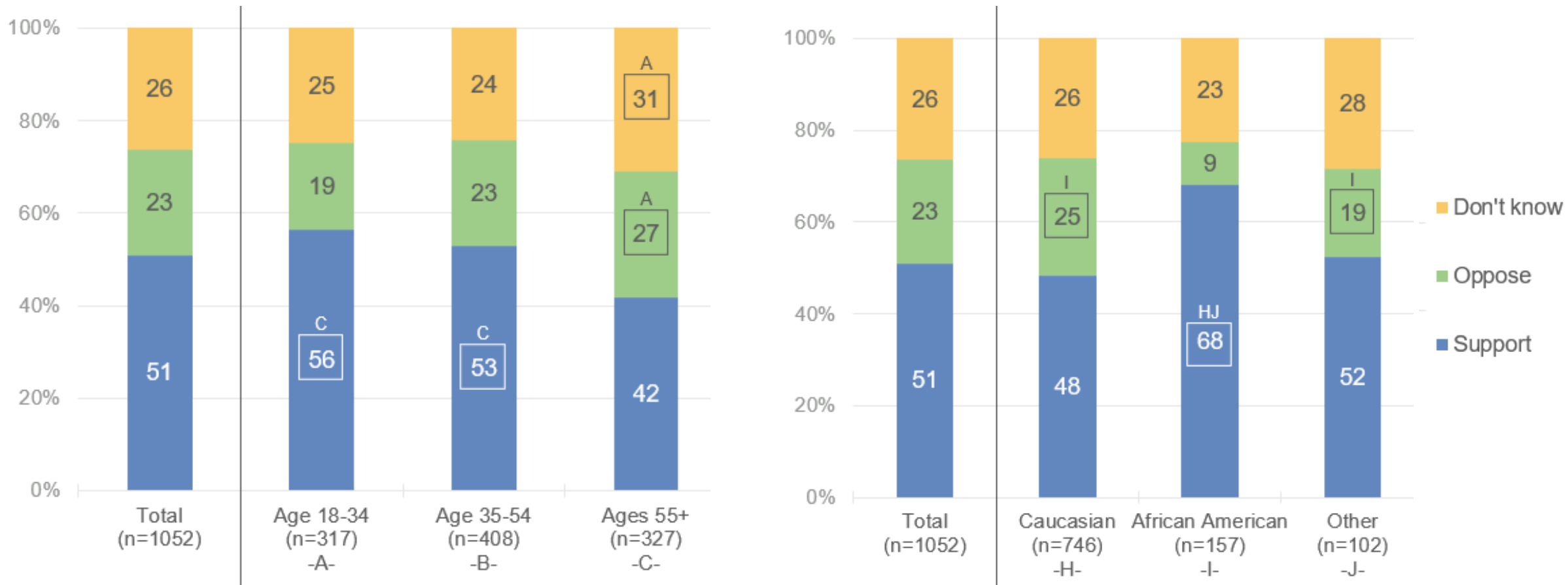
Those under 55 were more likely to agree that “fairness requires considering past burdens to distribute today’s benefits”

	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Fairness requires inclusion of everyone in project decision making	68	64	69	71	62	71	68	75 ^D
Fairness requires tradeoffs between people today and people in future generations	59	60	60	57	52	58	63 ^D	66 ^D
Fairness requires distributing today's project benefits and burdens to everyone	57	59	57	56	54	56	61	61
Fairness requires considering past burdens to distribute today's benefits	53	60 ^C	55 ^C	41	50	54	54	54

C7. Please indicate how much you agree or disagree with each of the following statements. (Choices: Disagree Completely, Disagree Somewhat, Neither Agree nor Disagree, Agree Somewhat, Agree Completely. Top 2 displayed here.)

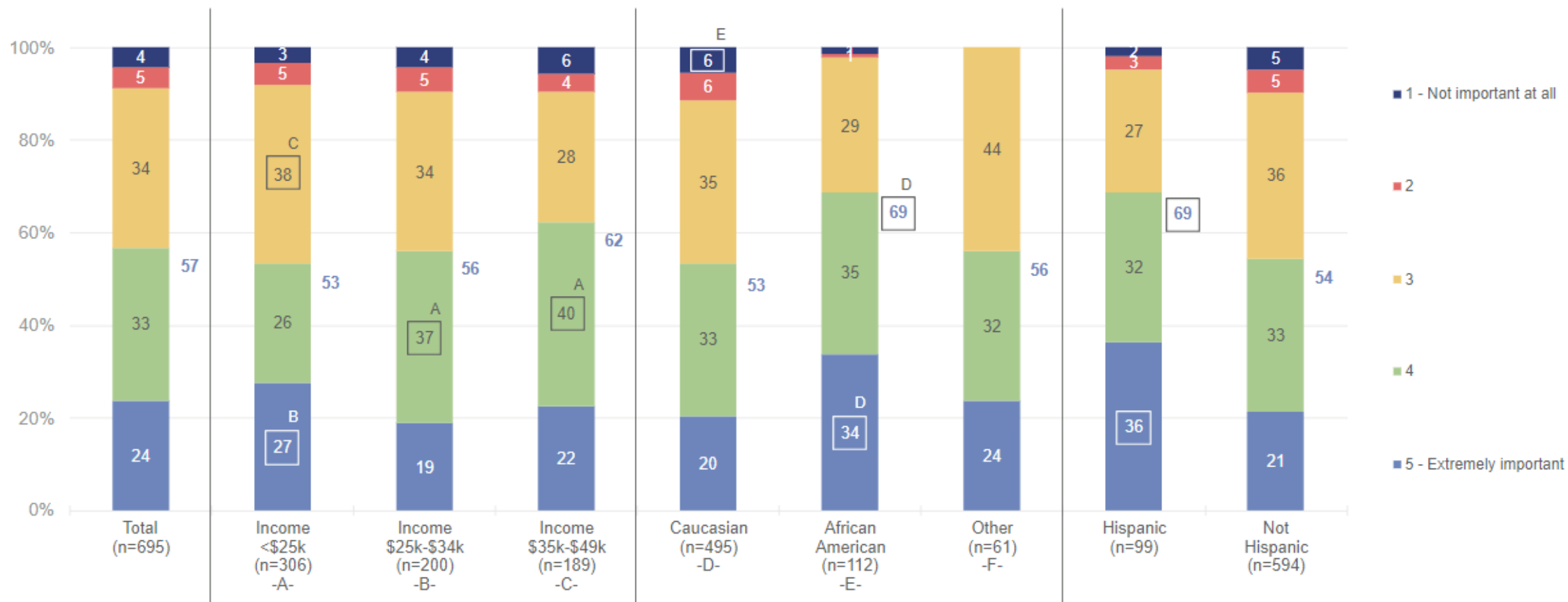
Approximately Half Support Biden Administration's Goal of Ensuring 40% of Benefits from Clean Energy Investments Benefits Disadvantaged Communities

Over half of those under age 55 support this goal
Approximately two-thirds of African Americans also support this goal



Base: Total Respondents C9. The Biden administration has a goal of ensuring 40% of benefits from clean energy investments will benefit disadvantaged communities. Do you support or oppose this goal?

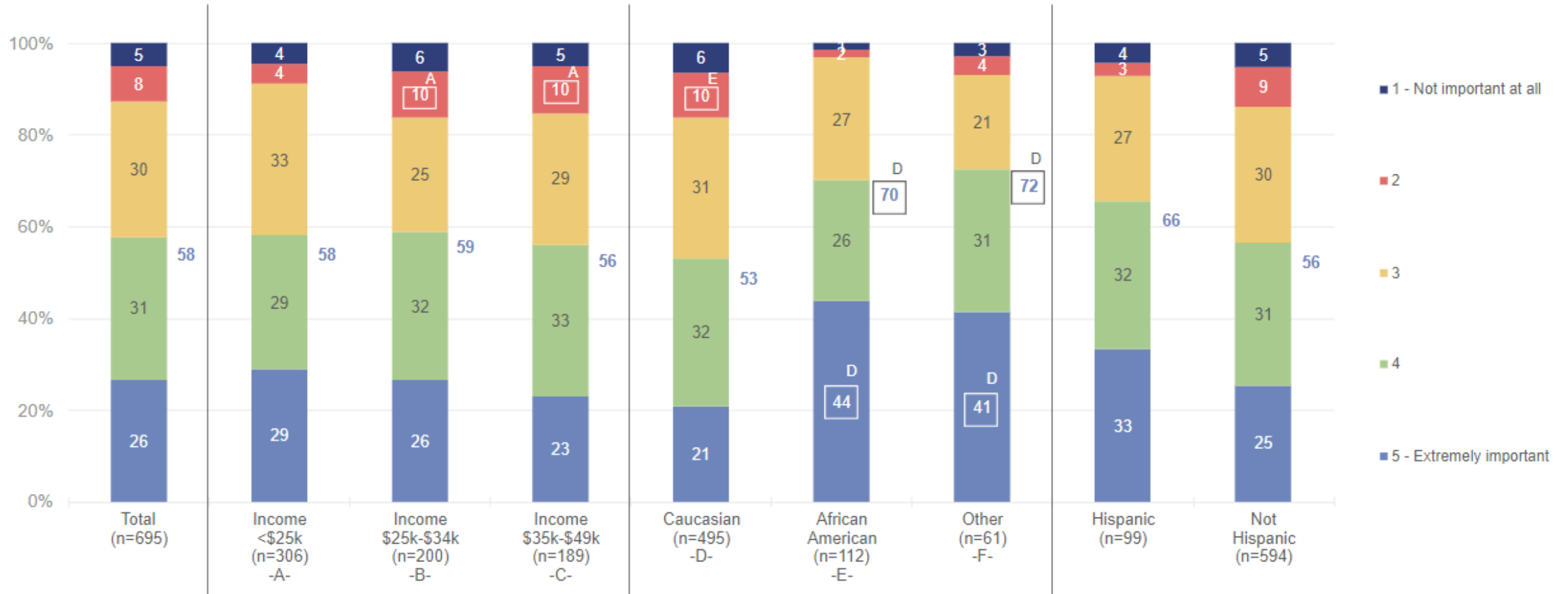
Importance Of “Equity”



Base: Total Respondents

H3. There has been a lot of discussion of “equity.” Equity means different things to different people. On a scale of 1 to 5, where “1” is not important at all and “5” is extremely important, how important is “equity” to you personally?

Importance Of “Environmental Justice”



Base: Total Respondents

H4. There has been a lot of discussion of “environmental justice.” Environmental justice also means different things to different people. On a scale of 1 to 5, where “1” is not important at all and “5” is extremely important, how important is “environmental justice” to you personally?



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Ranking of Clean Energy Investment Statements

Five Statements on Clean Energy Investments Tested

- The benefits of clean energy investments should be available to everyone
- The costs of clean energy investments should be fairly and equally shared by everyone
- Clean energy investments should benefit low-income customers and communities regardless of racial or ethnic considerations
- The costs and benefits of clean energy investment should be determined by market forces and not government policy
- Given past decision and impact on minority communities, future clean energy investments should show a greater benefit to minority communities

Demographics Drive Rankings of Alternative Clean Energy Investment Strategies

Younger- and Lower-Income-Adults Prefer Statements that Mention Low-Income Community Benefits

	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
The benefits of clean energy investments should be available to everyone	73	65	71	84 ^{AB}	70	69	75	77
The costs of clean energy investments should be fairly and equally shared by everyone	65	56	63	77 ^{AB}	60	62	71 ^{DE}	64
Clean energy investments should benefit low-income customers and communities, regardless of racial or ethnic considerations	61	67 ^C	60	54	66 ^G	65 ^G	57	52
The costs and benefits of clean energy investments should be determined by market forces and not by government policy	58	56	60	56	54	57	59	64 ^D
Given past decisions and impacts on minority communities, future clean energy investments should show a greater benefit to minority communities	44	55 ^{BC}	46 ^C	29	50 ^F	46 ^F	37	42

C8. Please rank the following five statements on your agreement with them, from the one that you agree with the most at the top to the one that you agree with the least at the bottom. (Rank the statements 1 to 5. Top 3 displayed here.)

Demographics Drive Ranking of Alternative Clean Energy Investment Statements (continued) Minorities Prefer Statements that Mention Benefits to Minority Communities

	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
The benefits of clean energy investments should be available to everyone	73	75	68	73	66	74	67	75 ^M	75
The costs of clean energy investments should be fairly and equally shared by everyone	65	67	59	59	66	65	58	67 ^M	68 ^M
Clean energy investments should benefit low-income customers and communities, regardless of racial or ethnic considerations	61	58	70 ^H	63	66	60	66 ^O	59	56
The costs and benefits of clean energy investments should be determined by market forces and not by government policy	58	60 ^I	50	57	49	59	54	58	63 ^M
Given past decisions and impacts on minority communities, future clean energy investments should show a greater benefit to minority communities	44	40	54 ^H	48	52	42	54 ^{NO}	41	38

C8. Please rank the following five statements on your agreement with them, from the one that you agree with the most at the top to the one that you agree with the least at the bottom. (Rank the statements 1 to 5. Top 3 displayed here.)



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Evaluating Six Clean Energy Investment Goals

“Improving Air and Water Quality” and “Lowering Utility Bills” Ranked Highest Among Six Clean Energy Investment Goals

Lowest ranked was “Increase Grid Reliability” with one third ranking it among the top three

“Create Good Paying Jobs” ranked higher among younger and lower-income consumers

	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Improve air and water quality	66	65	66	67	63	65	65	70
Lower my utility bills	56	53	61	54	63 ^G	60 ^G	56 ^G	45
Conserve natural resources	50	47	50	52	48	46	55 ^E	51
Slow climate change	50	50	47	54	46	49	50	56 ^D
Create good paying jobs	44	53 ^{BC}	44 ^C	34	52 ^{FG}	46 ^G	40	36
Increase grid reliability	34	32	33	38	28	34	34	41 ^D

C10. Consider the importance of different goals for clean energy investments and infrastructure investments for an electric grid. Please rank the following six statements on their importance to you, from the one that is most important at the top to the one that is least important to you at the bottom. (Rank the statements 1 to 6. Top 3 displayed here.)

Importance Ranking of Clean Energy Investment Goals (Cont'd.)

Ranked 1st/2nd/3rd Summary



	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Improve air and water quality	66	64	71	73	62	67	65	68	62
Lower my utility bills	56	57	57	57	58	56	56	54	62
Conserve natural resources	50	51 ⁱ	37	56 ⁱ	51	50	50	49	50
Slow climate change	50	50	49	46	49	50	51	52 ^o	43
Create good paying jobs	44	41	58 ^{HJ}	42	52	43	46	43	44
Increase grid reliability	34	37 ⁱ	28	27	28	35	32	33	39

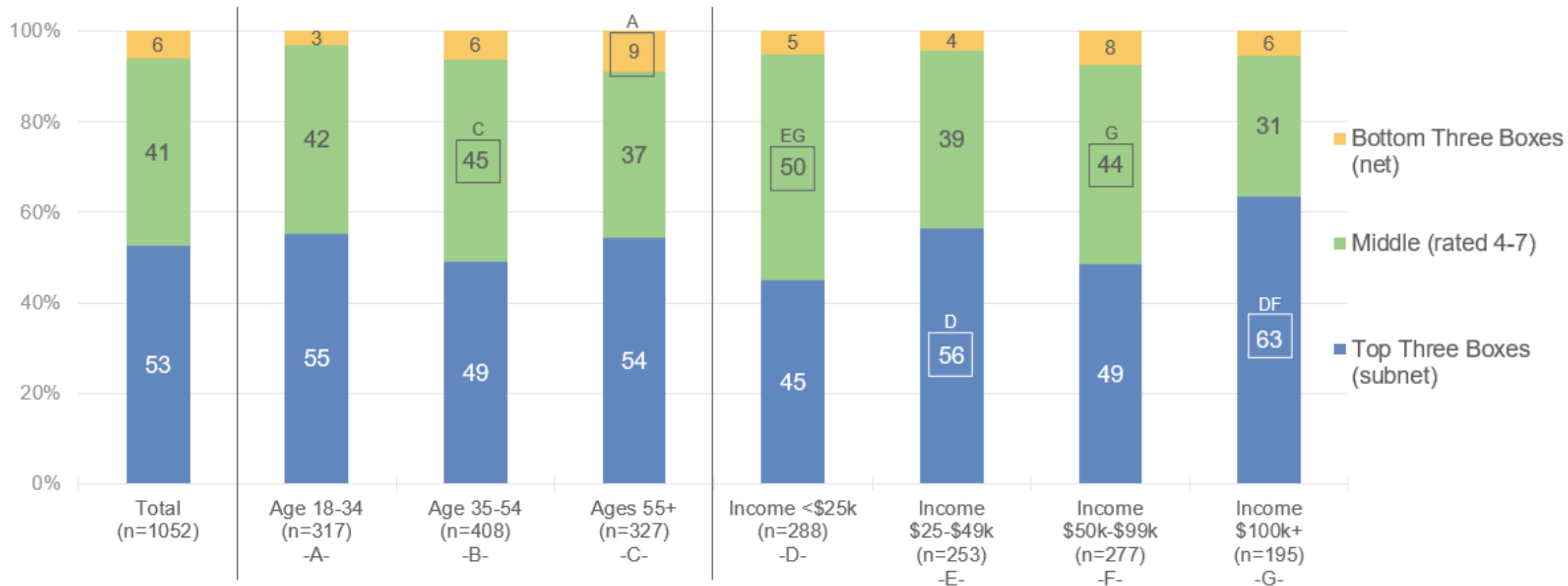
C10. Consider the importance of different goals for clean energy investments and infrastructure investments for an electric grid. Please rank the following six statements on their importance to you, from the one that is most important at the top to the one that is least important to you at the bottom. (Rank the statements 1 to 6. Top 3 displayed here.)



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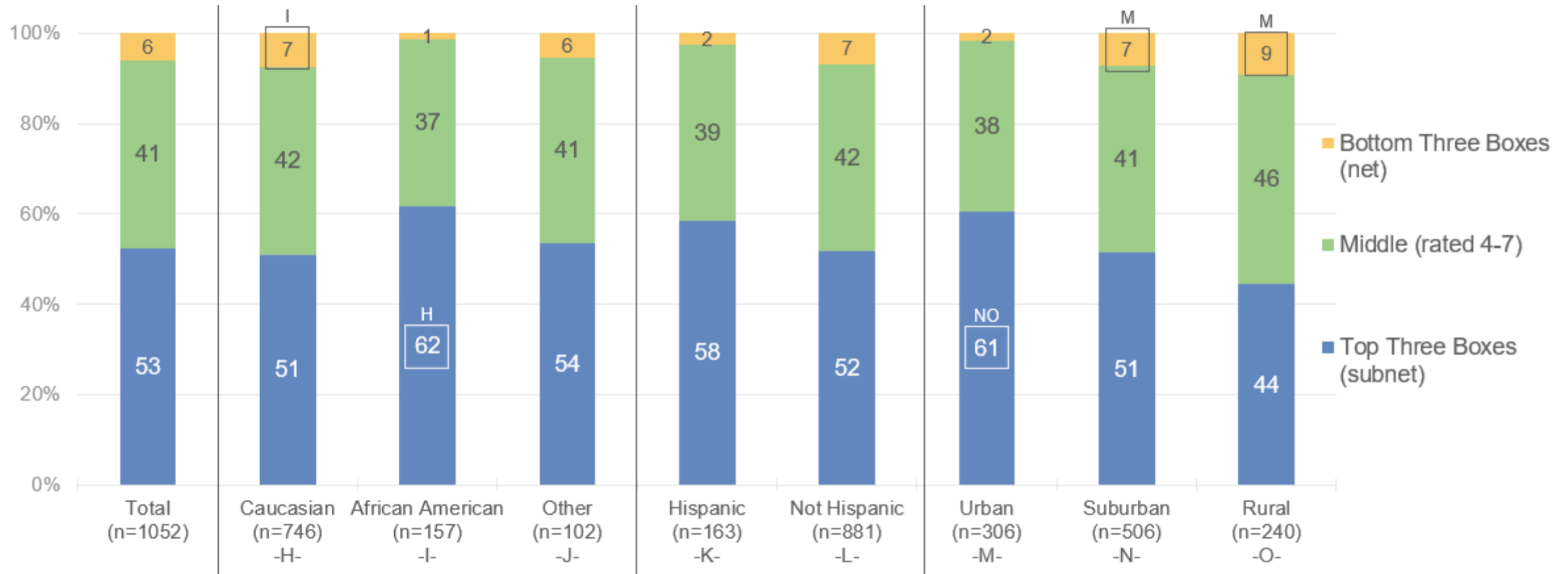
Importance of Environment-Friendly Utility Practices

Importance That Utility Reduces Emissions and Supports Environment-Friendly Practices



Base: Total Respondents C11. How important is it to you that your electric utility reduce emissions and support environment-friendly practices? (Scale of 1 to 10.)

Importance That Utility Reduces Emissions and Supports Environment-Friendly Practices (Cont'd.)



Base: Total Respondents C11. How important is it to you that your electric utility reduce emissions and support environment-friendly practices? (Scale of 1 to 10.)

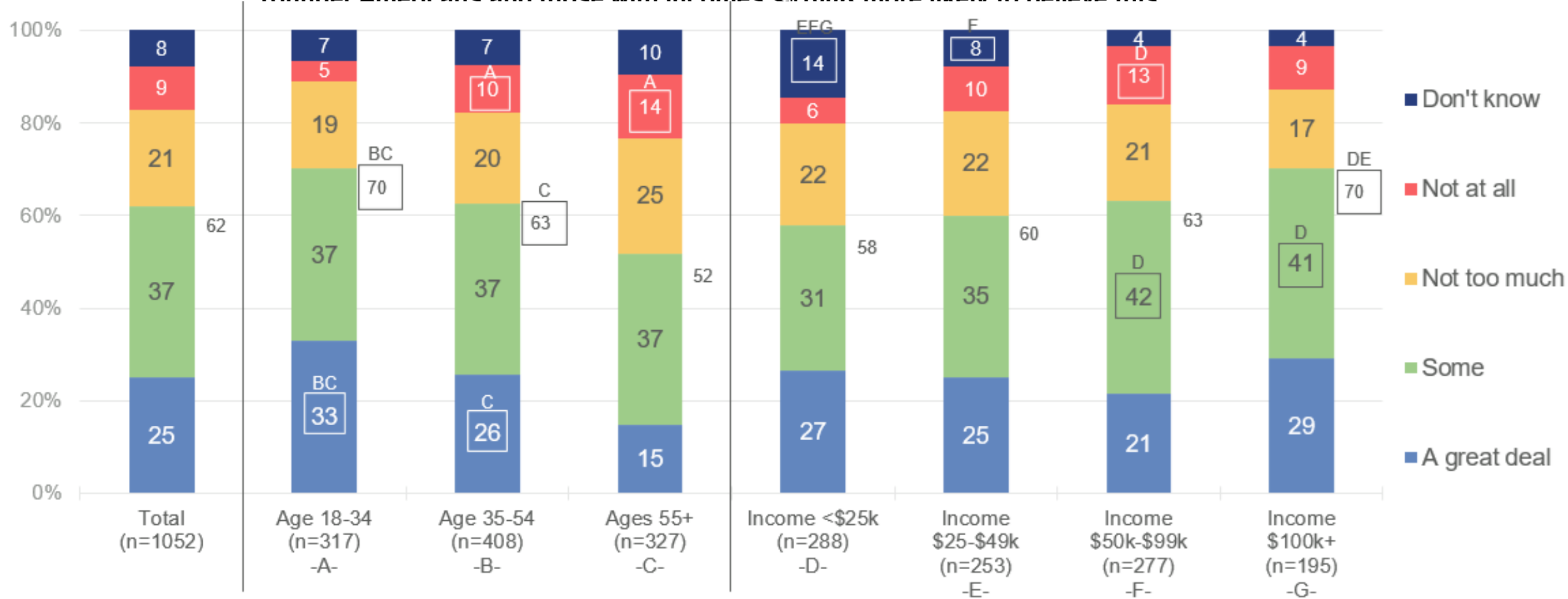


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Global Climate Change and the Future

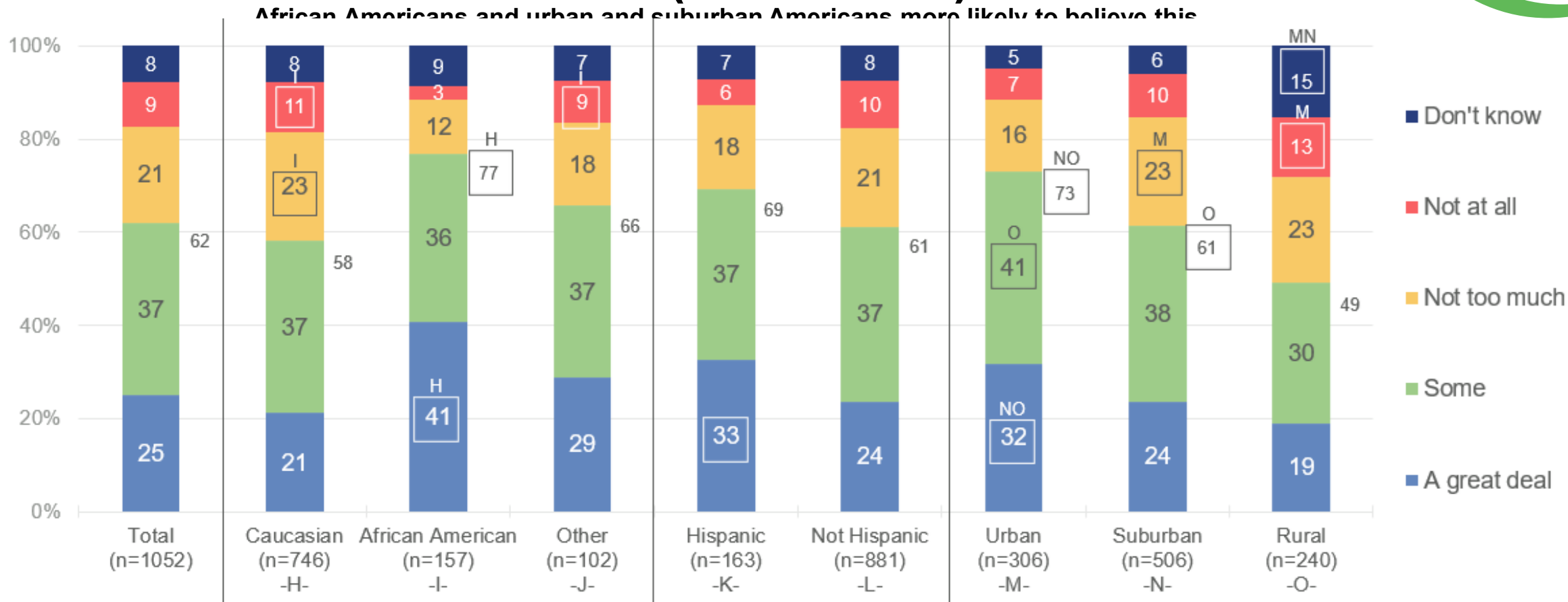
Six in Ten Believe Global Climate Change Currently Affects their Community to Some Extent

Younger Americans and those with incomes <\$100k more likely to believe this



Base: Total Respondents C14. How much, if at all, do you think global climate change is currently affecting your local community?

Six in Ten Believe Global Climate Change Currently Affects their Community to Some Extent (continued)



Base: Total Respondents C14. How much, if at all, do you think global climate change is currently affecting your local community?



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Recommendations

Recommendations

It is in everyone's best interest to focus on maintaining affordability of utility bills. There needs to be a clearer explanation of the impact of clean energy on utility bills, especially for those customers already struggling. The role and motivation of the utility also needs to be made more transparent. Cleaner communities lead to healthier communities. There is evidence this could be a very effective guide to decision-making and messaging. Segmentation of approaches and communications will be important. Neighborhood-level approaches should be used when possible.

Closing Thoughts

It is going to be a hard balancing act to maintain affordability in the utility sector and making investments in clean energy that will require a significant amount of investment in infrastructure and other costs to support those investments. Poorer Americans could bear the brunt of those costs through the utility tariff, thus the concern over cost-shifting. We need to be transparent and open about the cost-benefit equation of clean energy.

Achieving equity is equally challenging. Most Americans believe in the importance of equity and environmental justice; however, they are viewing those terms through different perspectives. We should embrace those differences, realizing that they are real, based oftentimes on experience, and strongly felt. Through our differences, we may find a better way to come together.

Appendices

Questions, Survey Conducted May 20-23, 2022

C1. What three words or phrases come to mind when you hear someone say, “clean energy”? (INCLUDE 3 BOXES. HAVE RESPONDENT ENTER ONE ANSWER IN EACH.)

C2. What three words or phrases come to mind when you hear someone say, “energy justice”? (ALLOW RESPONDENT TO ENTER VERBATIM)

C3. Please rank the following six words on how much you associate each with the word “equity”, from the one you most associate with “equity” at the top, to the one you least associate with “equity” at the bottom. (RANDOMIZE WORDS. HAVE RESPONDENT RANK FROM 1 – 6 USING DRAG & DROP.)

- Fairness
- Integrity
- Justice
- Reasonableness
- Equality
- Restitution

C4. Next please rank the following seven words on how much you associate each with the word “justice”, from the one you most associate with “justice” at the top, to the one you least associate with “justice” at the bottom. (RANDOMIZE WORDS. HAVE RESPONDENT RANK FROM 1 – 7 USING DRAG & DROP.)

- Authority
- Due process
- Honesty
- Integrity
- Law
- Right
- Truth

Questions, Survey Conducted May 20-23 (continued)

C5. Below is a list of pairs of words that might be used when discussing energy programs. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (RANDOMIZE PAIRS OF STATEMENTS AND POSITION OF STATEMENTS WITHIN PAIR. ALLOW ONE ANSWER FOR EACH. DO NOT SHOW NUMBER SCALE (1 to 7).)

- | | | |
|--------------------------------------|---|----------------|
| <input type="radio"/> Equity | — | Justice |
| <input type="radio"/> Clean | — | Renewable |
| <input type="radio"/> Green | — | Clean |
| <input type="radio"/> Stable | — | Predictable |
| <input type="radio"/> Infrastructure | — | Investment |
| <input type="radio"/> Local | — | Community |
| <input type="radio"/> Compassionate | — | Caring |
| <input type="radio"/> Discount | — | Incentive |
| <input type="radio"/> Sustainable | — | Renewable |
| <input type="radio"/> Control | — | Manage |
| <input type="radio"/> Climate Change | — | Global Warming |

C6. Please indicate how much you agree or disagree with each of the following statements. (RANDOMIZE & ALLOW ONE ANSWER FOR EACH) (1 Disagree Completely; 2 Disagree Somewhat; 3 Neither Agree nor Disagree; 4 Agree Somewhat; 5 Agree Completely)

- Clean energy will reduce energy costs and utility bills
- Clean energy will create good-paying jobs and help economic growth
- Clean energy will reduce local pollution and improve health outcomes
- Clean energy will reduce climate change and slow global warming
- Clean energy will help the U.S. lead and compete in the international economy

C7. Please indicate how much you agree or disagree with each of the following statements. (RANDOMIZE & ALLOW ONE ANSWER FOR EACH) (1 Disagree Completely; 2 Disagree Somewhat; 3 Neither Agree nor Disagree; 4 Agree Somewhat; 5 Agree Completely)

- Fairness requires considering past burdens to distribute today's benefits
- Fairness requires distributing today's project benefits and burdens to everyone
- Fairness requires inclusion of everyone in project decision making
- Fairness requires tradeoffs between people today and people in future generations

Questions, Survey Conducted May 20-23 (continued)

C8. Please rank the following five statements on your agreement with them, from the one that you agree with the most at the top to the one that you agree with the least at the bottom. (RANDOMIZE STATEMENTS. HAVE RESPONDENT RANK FROM 1 – 5 USING DRAG & DROP.)

- The costs of clean energy investments should be fairly and equally shared by everyone
- The benefits of clean energy investments should be available to everyone
- Given past decisions and impacts on minority communities, future clean energy investments should show a greater benefit to minority communities
- Clean energy investments should benefit low-income customers and communities, regardless of racial or ethnic considerations
- The costs and benefits of clean energy investments should be determined by market forces and not by government policy

C9. The Biden administration has a goal of ensuring 40% of benefits from clean energy investments will benefit disadvantaged communities. Do you support or oppose this goal? (ALLOW ONE ANSWER)

- Support
- Oppose
- Don't know

C10. Consider the importance of different goals for clean energy investments and infrastructure investments for an electric grid. Please rank the following six statements on their importance to you, from the one that is most important at the top to the one that is least important to you at the bottom. (RANDOMIZE STATEMENTS. HAVE RESPONDENT RANK FROM 1 – 6 USING DRAG & DROP.)

- Lower my utility bills
- Slow climate change
- Create good paying jobs
- Increase grid reliability
- Improve air and water quality
- Conserve natural resources

Questions, Survey Conducted May 20-23 (continued)

C11. How important is it to you that your electric utility reduce emissions and support environment-friendly practices? (ALLOW ONE ANSWER.)

Not Important At All					Extremely Important				
-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-

C12. How concerned are you that costs are being shifted onto your utility bill to invest in and maintain infrastructure to support renewable energy and electric vehicles? (ALLOW ONE ANSWER.)

Not Concerned At All					Extremely Concerned				
-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-	-10-

C13. Looking to the future 50 years from now, which of the following do you think is more likely to happen in the U.S.? (RANDOMIZE AND ALLOW ONE ANSWER)

- New technology will be able to address most of the problems caused by global climate change
- Major changes to everyday life will be needed to address the problems caused by global climate change
- Don't know

C14. How much, if at all, do you think global climate change is currently affecting your local community? (ALLOW ONE ANSWER)

- A great deal
- Some
- Not too much
- Not at all
- Don't know

C15. Which, if any, of the following describes someone in your household? (RANDOMIZE & ALLOW MULTIPLE ANSWERS.)

- Someone has a medical need that requires thermal comfort (warmth or coolness)
- Someone uses a medical device that requires reliable electricity
- Someone is a young child or an elderly person who requires reliable utility service (water, electricity, etc.)
- Someone works from home and requires reliable utility service
- Someone has a very strong preference regarding thermal comfort (warmth or coolness)
- None of the above

Demographics (1 of 6)

		Age			Household Income			
	Total	18-34	35-54	55+	Under \$25k	\$25k - \$49k	\$50k - \$99k	\$100k+
		-A-	-B-	-C-	-D-	-E-	-F-	-G-
	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Gender								
Male	49	49	49	49	36	47 D	56 DE	64 DE
Female	51	51	51	51	64 EFG	53 FG	44	36
Mean Age	45.0	27.1	43.0 A	67.9 AB	41.4	43.6	46.9 DE	48.7 DE
Marital Status								
Married	48	32	50 A	64 AB	33	38	51 DE	76 DEF
Not Married	51	66 BC	50 C	36	66 FG	62 FG	48 G	23
Mean Household Size	2.8	3.2 C	3.0 C	2.2	2.8	2.7	2.9	3.0 E
Presence of Children								
Children Present	37	49 C	48 C	9	33	33	38	48 DEF
No Children Present	63	51	52	91 AB	67 G	67 G	62 G	52
Parent Of Children In Household								
Parent	33	40 C	46 C	6	26	29	35 D	47 DEF
Not the Parent	67	60	54	94 AB	74 FG	71 G	65 G	53

Demographics (2 of 6)

		Racial Subgroups			Ethnic Subgroups		Type of Community		
	<u>Total</u>	<u>Caucasian</u> -H-	<u>African American</u> -I-	<u>Other</u> -J-	<u>Hispanic</u> -K-	<u>Not Hispanic</u> -L-	<u>Urban</u> -M-	<u>Suburban</u> -N-	<u>Rural</u> -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Gender									
Male	49	49	50	51	50	49	48	53 ^O	42
Female	51	51	50	49	50	51	52	47	58 ^N
Mean Age	45.0	47.7 ^{IJ}	39.5	38.7	35.5	46.8	40.4	46.9 ^M	46.9 ^M
Marital Status									
Married	48	52 ^I	32	46 ^I	35	50	45	48	52
Not Married	51	47	68 ^{HJ}	54	63	50	54	52	46
Mean Household Size	2.8	2.8	2.8	3.0	3.1	2.8	2.8	2.8	3.0 ^N
Presence of Children									
Children Present	37	35	40	43	45	35	45 ^N	32	36
No Children Present	63	65	60	57	55	65	55	68 ^M	64
Parent Of Children In Household									
Parent	33	31	36	38	37	32	42 ^{NO}	29	30
Not the Parent	67	69	64	62	63	68	58	71 ^M	70 ^M

Demographics (3 of 6)

		Age			Household Income			
	Total	18-34	35-54	55+	Under \$25k	\$25k - \$49k	\$50k - \$99k	\$100k+
		-A-	-B-	-C-	-D-	-E-	-F-	-G-
	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Education								
No College	33	36 ^C	33	27	53 ^{EFG}	36 ^{FG}	26 ^G	9
College	67	63	66	73 ^A	46	64 ^D	74 ^{DE}	91 ^{DEF}
Employment								
Employed	55	69 ^C	67 ^C	20	35	62 ^D	62 ^D	67 ^D
Not Employed	44	29	31	80 ^{AB}	63 ^{EFG}	37	38	33
Household Income								
Mean (In thousands)	64.9	56.3	66.1 ^A	73.1 ^A	14.5	36.9 ^D	72.4 ^{DE}	153.4 ^{DEF}
Median (In thousands)	48.0	39.8	49.0	58.4	14.1	36.3	70.7	143.0
Home Ownership								
Rent	41	57 ^{BC}	40 ^C	23	61 ^{FG}	52 ^{FG}	32 ^G	14
Own	52	35	51 ^A	73 ^{AB}	26	41 ^D	64 ^{DE}	85 ^{DEF}
Other	7	9 ^C	8 ^C	4	13 ^{EFG}	7	4	2
Type Of Community								
Urban	29	36 ^C	32 ^C	19	34	31	26	29
Suburban	47	42	46	55 ^{AB}	37	41	50 ^{DE}	62 ^{DEF}
Rural	23	22	22	26	29 ^G	29 ^G	24 ^G	9

Demographics (4 of 6)

		Racial Subgroups			Ethnic Subgroups		Type of Community		
	Total	Caucasian	African American	Other	Hispanic	Not Hispanic	Urban	Suburban	Rural
		-H-	-I-	-J-	-K-	-L-	-M-	-N-	-O-
	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Education									
No College	33	32	40 ^{HJ}	27	32	33	34 ^N	26	44 ^{MN}
College	67	68 ^I	60	71	68	67	66 ^O	73 ^{MO}	55
Employment									
Employed	55	53	59	63	66	53	65 ^{NO}	54 ^O	42
Not Employed	44	47 ^J	38	35	34	46	33	46 ^M	55 ^{MN}
Household Income									
Mean (In thousands)	64.9	69.6 ^I	44.1	66.0 ^I	55.4	66.9	63.7 ^O	74.9 ^{MO}	46.5
Median (In thousands)	48.0	54.2	33.4	45.4	33.7	50.7	43.2	59.6	35.8
Home Ownership									
Rent	41	34	67 ^{HJ}	47 ^H	53	38	58 ^{NO}	34	32
Own	52	59 ^{IJ}	29	44 ^I	38	55	39	59 ^M	55 ^M
Other	7	7	5	9	10	6	3	7 ^M	13 ^{MN}
Type Of Community									
Urban	29	24	50 ^{HJ}	29	42	27	100 ^{NO}	-	-
Suburban	47	49 ^I	37	60 ^{HI}	43	48	-	100 ^{MO}	-
Rural	23	27 ^{IJ}	13	10	15	24	-	-	100 ^{MN}

Demographics (5 of 6)

		Age			Household Income			
	Total	18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
	(1052) %	(317) %	(408) %	(327) %	(288) %	(253) %	(277) %	(195) %
Hispanic Origin Or Descent								
Hispanic	15	24 BC	15 C	5	20 FG	16	12	11
Not Hispanic	84	74	84 A	95 AB	78	83	88 D	88 D
Ethnic Background								
Caucasian	72	63	67	89 AB	64	68	78 DE	81 DE
African-American	13	17 C	15 C	7	17 FG	19 FG	10 G	5
Asian/Pacific Islander	6	6 C	8 C	2	5	4	6	8
Mixed ethnic background	2	2	3 C	1	3	3	1	1
Native American	2	2 C	3 C	-	2	2	1	1
Other	1	2 C	1 C	-	1	0	1	2
Refused	4	9 BC	3	1	7 F	5	2	3
Political Affiliation								
Democrat	35	33	36	34	33	35	31	42 DF
Independent	22	23	23	18	23	22	25 G	17
Republican	30	27	28	38 AB	21	30 D	38 D	34 D
Other political party	3	3	3	3	4 F	5 F	0	3 F
Not registered to vote	10	14 C	10	7	20 EFG	9	6	4
Census Region								
Northeast	19	18	20	20	20	15	17	23 E
South	36	36	35	36	36	40 G	39	30
Midwest	23	22	23	23	26 G	25 G	23	17
West	22	23	22	20	18	21	21	30 DEF

Demographics (6 of 6)

		Racial Subgroups			Ethnic Subgroups		Type of Community		
	Total	Caucasian	African American	Other	Hispanic	Not Hispanic	Urban	Suburban	Rural
		-H-	-I-	-J-	-K-	-L-	-M-	-N-	-O-
	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Hispanic Origin Or Descent									
Hispanic	15	10	9	28 ^{HI}	100	-	21 ^{NO}	14	10
Not Hispanic	84	89 ^J	91 ^J	71	-	100	78	86 ^M	88 ^M
Ethnic Background									
Caucasian	72	100 ^{IJ}	-	-	49	76	59	74 ^M	84 ^{MN}
African-American	13	-	100 ^{HJ}	-	8	14	22 ^{NO}	10	7
Asian/Pacific Islander	6	-	-	53 ^{HI}	4	6	4	8 ^{MO}	1
Mixed ethnic background	2	-	-	20	6	1	2	3	1
Native American	2	-	-	16	2	2	2	1	2
Other	1	-	-	11	7	0	2	1	0
Refused	4	-	-	-	24	1	8 ^N	2	4
Political Affiliation									
Democrat	35	30	65 ^{HJ}	34	36	35	50 ^{NO}	33 ^O	18
Independent	22	22	17	25	28	21	20	23	22
Republican	30	35 ^I	7	30 ^I	22	32	19	33 ^M	40 ^M
Other political party	3	3	4	3	2	3	2	4	3
Not registered to vote	10	11	6	8	11	10	10	8	17 ^{MN}
Census Region									
Northeast	19	21	15	17	17	20	23	18	18
South	36	31	61 ^{HJ}	34	44	34	34	37	35
Midwest	23	26 ^I	15	18	12	25	19	22	30 ^{MN}
West	22	22 ^I	9	31 ^I	28	21	25 ^O	23	17

Ranking of Association of Words with “Justice” (Cont’d.) Top 1st/2nd/3rd Summary



	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Truth	57	55	64	60	58	56	55	58	57
Honesty	50	49	58 ^H	52	51	50	47	52	51
Right	48	47	54	52	50	47	52	46	45
Law	47	50 ^I	32	40	46	47	49	47	44
Due Process	39	42	34	34	26	41 ^K	35	42	39
Integrity	36	36	32	41	39	35	34	38	35
Authority	23	22	27	20	29	23	29 ^N	18	28 ^N

C4. Next please rank the following seven words on how much you associate each with the word “justice”, from the one you most associate with “justice” at the top, to the one you least associate with “justice” at the bottom. (Rank the words 1 to 7. Top 3 displayed here.)

Comfort With Words to Discuss Energy Programs – Age/Income Top-2-Box



		Age			Household Income			
	Total	18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Equity Justice	25	27	23	25	21	25	[31] _D	24
	29	[34] _C	[30] _C	23	[33] _F	32	25	29
Clean Renewable	34	36	33	34	33	37	36	32
	26	28	23	28	23	27	26	30
Green Clean	22	[27] _C	22	17	25	22	19	23
	39	38	37	44	36	41	43	40
Stable Predictable	41	41	41	41	33	[45] _D	40	[50] _{DF}
	14	14	15	12	17	12	13	13
Infrastructure Investment	25	20	26	[28] _A	19	24	26	[31] _D
	34	[39] _C	33	30	33	38	30	38

C5. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (Scale in a range of 1-7. Top 2 displayed here.)

Comfort With Words to Discuss Energy Programs – Age/Income (Cont'd.) Top-2-Box



	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Local	24	22	24	26	24	27	25	20
Community	34	36	36	31	29	33	37	<input type="checkbox"/> 40 D
Compassionate	26	25	27	25	22	26	27	<input type="checkbox"/> 31 D
Caring	28	30	27	28	28	30	26	29
Discount	25	28	25	22	20	<input type="checkbox"/> 29 D	24	<input type="checkbox"/> 28 D
Incentive	32	29	34	33	29	34	34	35
Sustainable	29	31	30	26	24	<input type="checkbox"/> 35 D	31	<input type="checkbox"/> 27 E
Renewable	31	29	31	33	30	28	30	37
Control	23	<input type="checkbox"/> 26 C	24	19	<input type="checkbox"/> 28 F	23	19	23
Manage	34	35	32	36	30	34	37	37
Climate Change	36	35	37	37	34	35	39	40
Global Warming	19	<input type="checkbox"/> 23 C	18	16	21	19	17	20

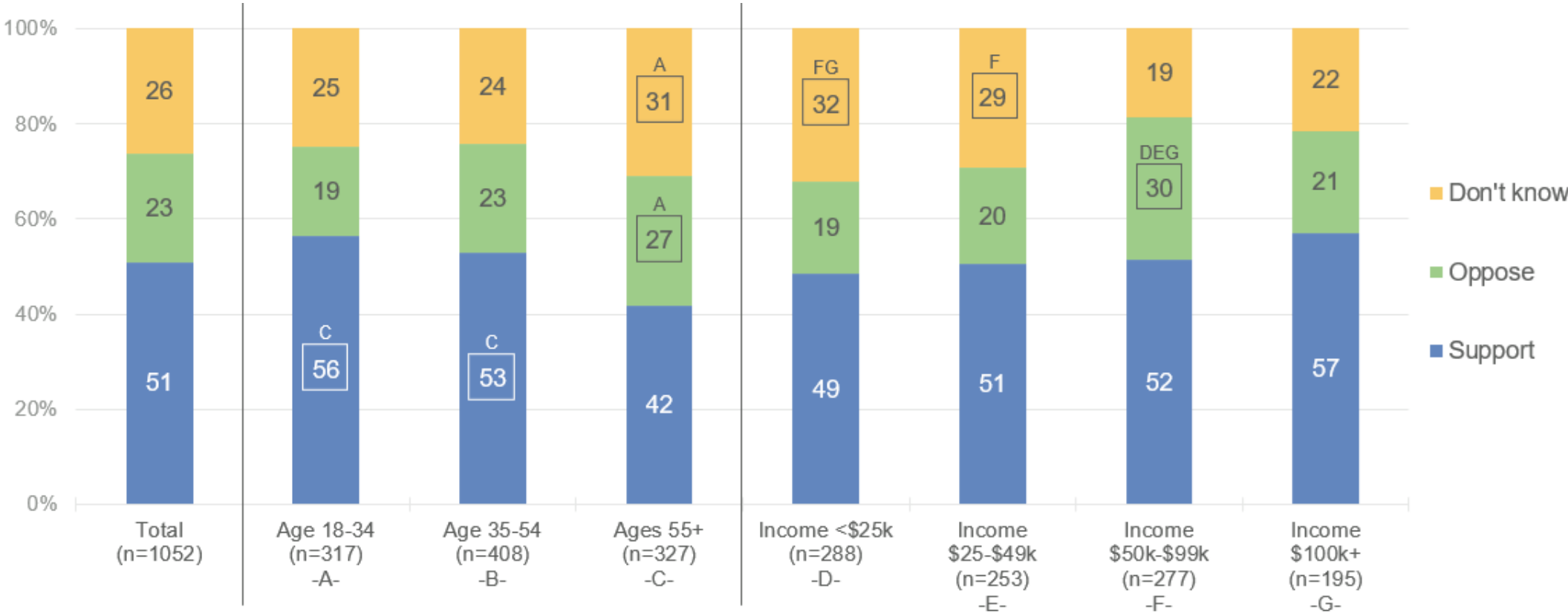
C5. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (Scale in a range of 1-7. Top 2 displayed here.)

Comfort With Words to Discuss Energy Programs – Ethnicity/Community Top-2-Box

	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasia n -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Equity	25	25	29	24	15	27	26	25	24
Justice	29	27	36 ^H	27	41	27	35 ^N	27	26
Clean	34	33	46 ^{HJ}	31	42	33	38	33	32
Renewable	26	26	28	23	23	27	26	28	22
Green	22	21	23	29	27	21	26	20	22
Clean	39	37	52 ^{HJ}	38	41	39	41	39	38
Stable	41	39	48	40	39	41	43	40	39
Predictable	14	14	17 ^J	8	13	14	15	12	14
Infrastructure	25	24	29	29	24	25	25	27	20
Investment	34	33	38	33	40	33	38	32	34

C5. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (Scale in a range of 1-7. Top 2 displayed here.)

Clean Energy Investments Towards Disadvantaged Communities



Base: Total Respondents C9. The Biden administration has a goal of ensuring 40% of benefits from clean energy investments will benefit disadvantaged communities. Do you support or oppose this goal?

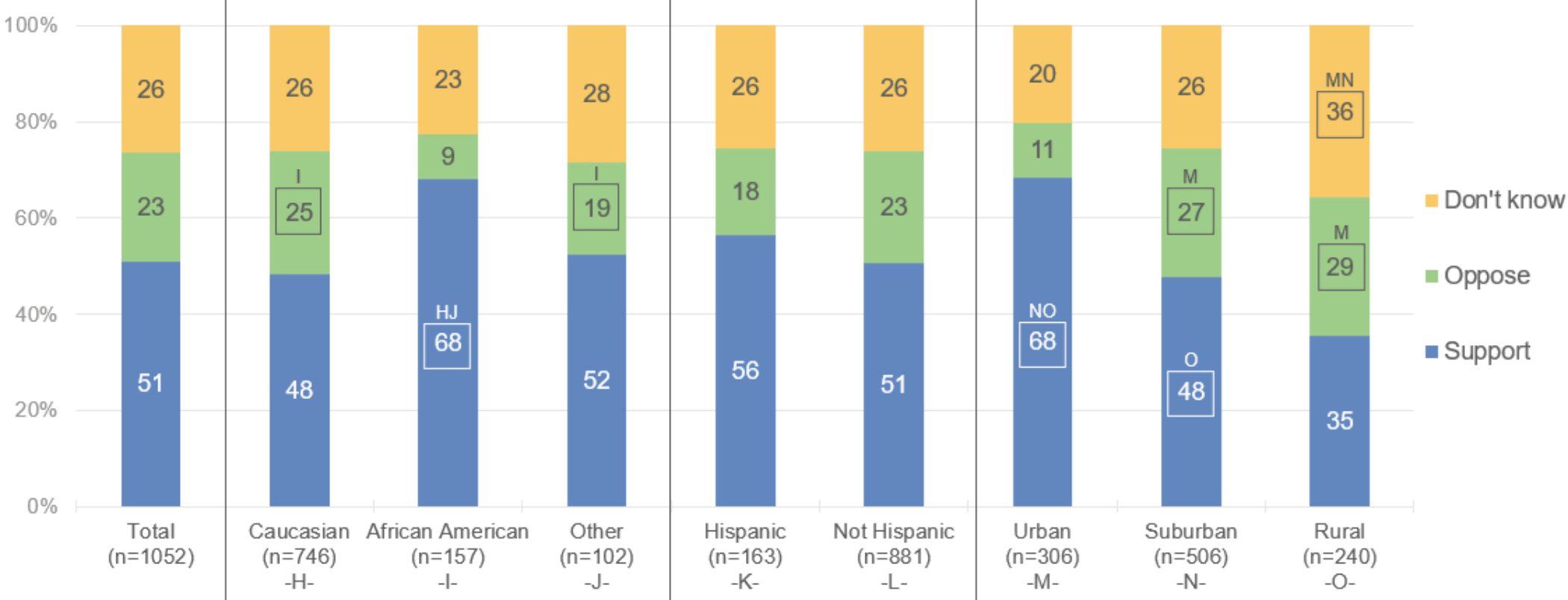
Comfort With Words to Discuss Energy Programs – Ethnicity/Community (Cont'd.) Top-2-Box



	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Local	24	24	22	26	28	23	23	22	[29] N
Community	34	33	[47] HJ	33	35	35	[39] O	35	28
Compassionate	26	26	25	30	29	25	25	28	23
Caring	28	28	[38] HJ	21	28	29	[33] N	25	29
Discount	25	24	26	30	26	25	25	22	[31] N
Incentive	32	32	37	31	31	32	[37] O	32	27
Sustainable	29	27	35	[39] H	30	29	29	29	29
Renewable	31	31	30	23	35	30	33	31	27
Control	23	22	29	19	26	22	[25] N	19	[28] N
Manage	34	34	36	33	29	35	32	37	31
Climate Change	36	37	40	37	27	[38]	38	37	32
Global Warming	19	18	23	21	[34]	17	22	19	17

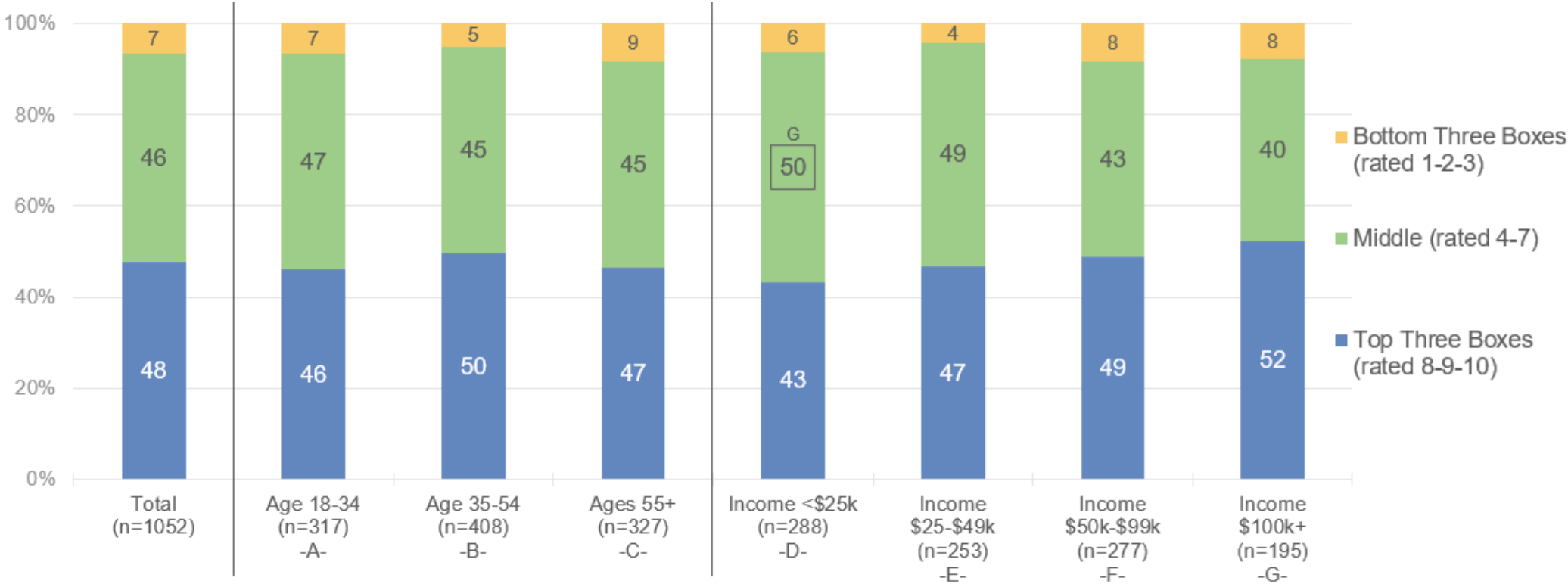
C5. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (Scale in a range of 1-7. Top 2 displayed here.)

Clean Energy Investments Towards Disadvantaged Communities (Cont'd.)



Base: Total Respondents C9. The Biden administration has a goal of ensuring 40% of benefits from clean energy investments will benefit disadvantaged communities. Do you support or oppose this goal?

Concern for Shifting Investment Costs Onto Utility Bill



Base: Total Respondents C12. How concerned are you that costs are being shifted onto your utility bill to invest in and maintain infrastructure to support renewable energy and electric vehicles? (Scale of 1 to 10.)

Younger Households Identify with Greater Needs for Reliable Electric Service

		Age			Household Income			
	<u>Total</u>	<u>18-34</u> -A-	<u>35-54</u> -B-	<u>55+</u> -C-	<u>Under \$25k</u> -D-	<u>\$25k - \$49k</u> -E-	<u>\$50k - \$99k</u> -F-	<u>\$100k+</u> -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Medical Related (net)	29	36 ^C	30 ^C	18	34 ^F	28	22	32 ^F
Someone has a medical need that requires thermal comfort (warmth or coolness)	18	23 ^C	19 ^C	11	22	17	15	19
Someone uses a medical device that requires reliable electricity	18	23 ^C	19 ^C	11	22 ^F	18	13	22 ^F
Someone is a young child or an elderly person who requires reliable utility service (water, electricity, etc.)	26	30 ^C	29 ^C	18	26	28	26	28
Someone works from home and requires reliable utility service	25	30 ^C	30 ^C	11	20	20	28 ^D	32 ^{DE}
Someone has a very strong preference regarding thermal comfort (warmth or coolness)	25	31 ^C	25	20	22	28	26	27
None of the above	35	25	30	53 ^{AB}	37	34	35	30

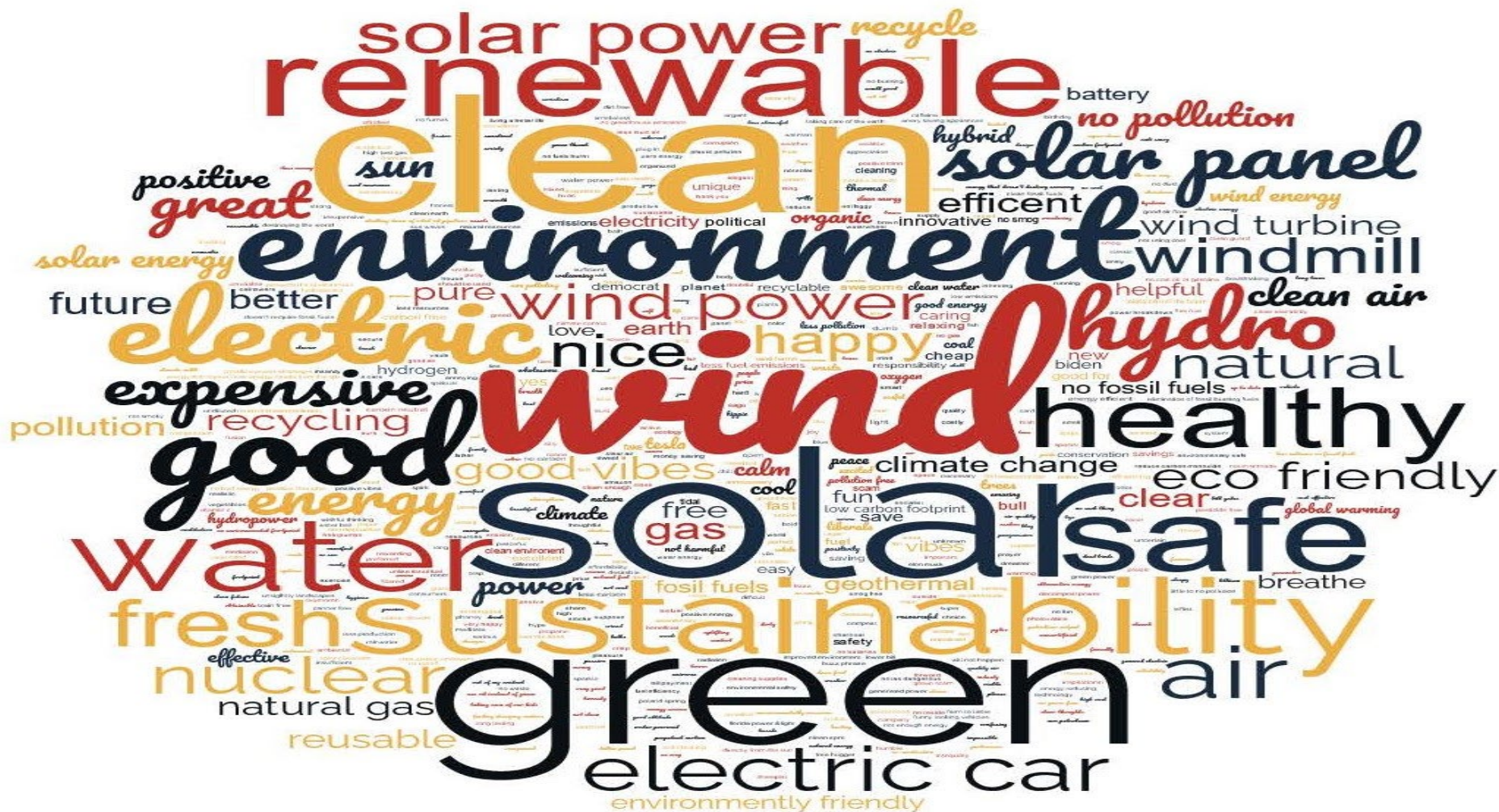
C15. Which, if any, of the following describes someone in your household?

Urban Households Identify with Greater Needs for Reliable Electric Service

	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Medical Related (net)	29	28	28	31	33	28	34 ^N	26	28
Someone has a medical need that requires thermal comfort (warmth or coolness)	18	18	18	16	22	17	23 ^N	15	17
Someone uses a medical device that requires reliable electricity	18	17	18	22	20	18	20	18	18
Someone is a young child or an elderly person who requires reliable utility service (water, electricity, etc.)	26	24	30	31	32	25	29 ^O	26	21
Someone works from home and requires reliable utility service	25	23	24	31	32	23	26 ^O	29 ^O	14
Someone has a very strong preference regarding thermal comfort (warmth or coolness)	25	25	28	26	31	25	27	28 ^O	19
None of the above	35	37	31	27	27	37	30	34	44 ^{MN}

C15. Which, if any, of the following describes someone in your household?

People Associate the Words “Clean Energy” with Renewable Resources and Electric Technologies



Base: Total Respondents (n=1052) C1. What three words or phrases come to mind when you hear someone say, “clean energy”?

“Fairness” and “Equality” Were Ranked Highest Among Six Words Associated with “Equity”

72% & 70%, respectively, ranked those words 1st, 2nd, or 3rd and older adults are more likely to associate “fairness” with equity

“Restitution” was least associated with equity, but had a significantly higher level of association among those under 55



	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Fairness	72	62	72 ^A	84 ^{AB}	68	73	72	76
Equality	70	72	67	71	71	72	68	71
Justice	53	57	51	51	53	53	54	49
Integrity	44	46	45	41	44	37	53 ^{DE}	45
Reasonableness	40	37	42	42	42	42	36	39
Restitution	20	26 ^c	24 ^c	10	21	23	17	20

C3. Please rank the following six words on how much you associate each with the word “equity,” from the one you most associate with “equity” at the top, to the one you least associate with “equity” at the bottom. (Rank the words 1 to 6. Top 3 displayed here.)

“Truth” and “Honesty” Were Ranked Highest Among Seven Words Association with “Justice”

57% & 50%, respectively, ranked those words 1st, 2nd, or 3rd

Those under age 55 and lower-income adults indicated a significantly higher association of the word “authority” with justice



	Total	Age			Household Income			
		18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Truth	57	60	53	60	63 ^F	55	53	58
Honesty	50	49	49	54	50	51	47	52
Right	48	52	46	44	46	49	47	48
Law	47	45	48	48	47	47	51 ^G	41
Due Process	39	32	42 ^A	43 ^A	35	37	43	42
Integrity	36	37	35	36	34	32	37	42 ^E
Authority	23	24 ^C	28 ^C	16	26 ^G	29 ^G	22	16

C4. Next please rank the following seven words on how much you associate each with the word “justice”, from the one you most associate with “justice” at the top, to the one you least associate with “justice” at the bottom. (Rank the words 1 to 7. Top 3 displayed here.)

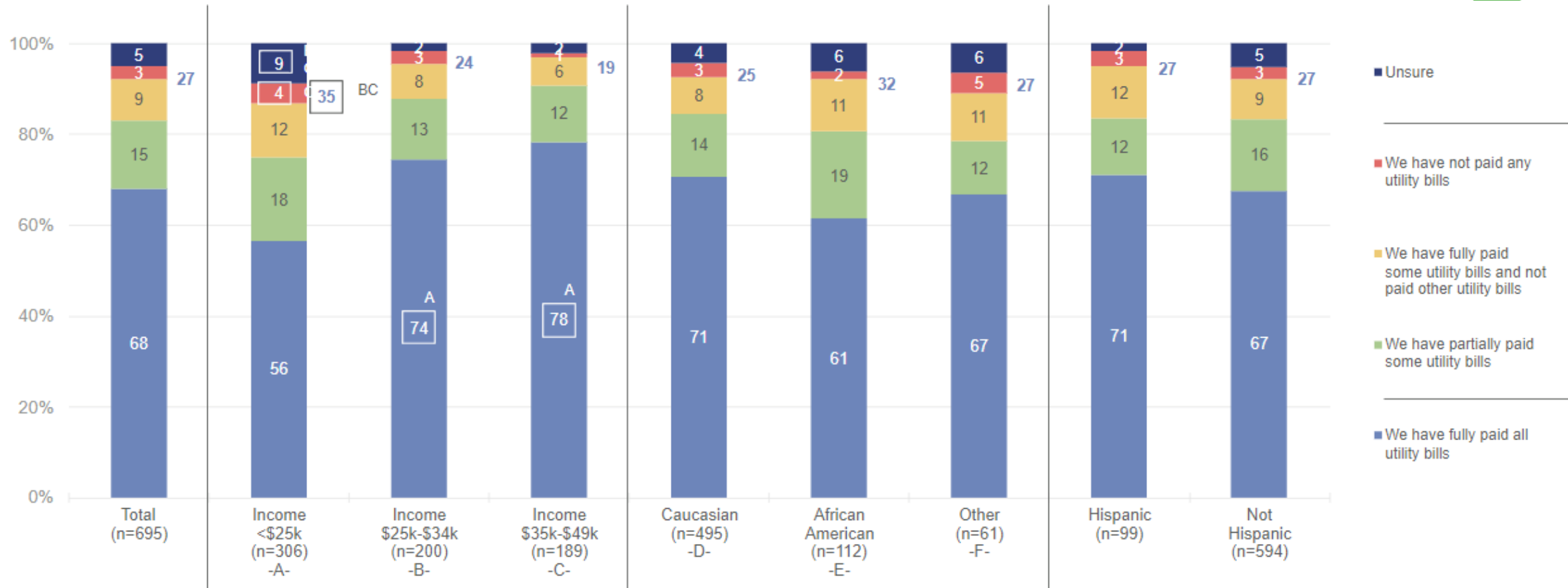
Ranking of Association of Words with “Equity” (Cont’d.)

Top 1st/2nd/3rd Summary

	Total	Racial Subgroups			Ethnic Subgroups		Type of Community		
		Caucasian -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Fairness	72	73	68	75	69	73	65	77 ^M	70
Equality	70	69	72	69	77	69	71	69	70
Justice	53	51	56	61	55	53	59 ^{NO}	51	50
Integrity	44	44	44	39	45	44	48	42	45
Reasonableness	40	43 ^I	34	33	33	41	36	41	45
Restitution	20	19	26	23	21	20	21	20	20

C3. Please rank the following six words on how much you associate each with the word “equity,” from the one you most associate with “equity” at the top, to the one you least associate with “equity” at the bottom. (Rank the words 1 to 6. Top 3 displayed here.)

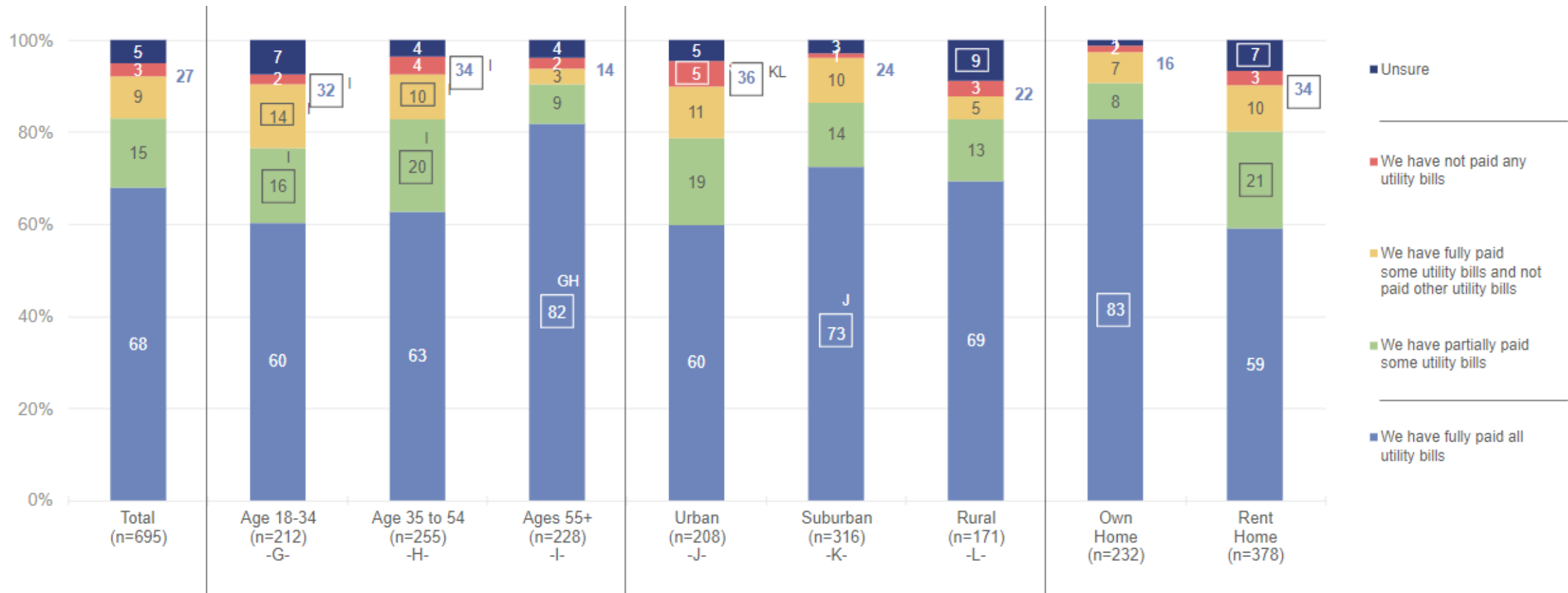
Household's Payment of Utility Bills During COVID-19



Base: Total Respondents

H8. During the COVID-19 pandemic, nearly every electric, gas, and water utility has adopted a policy of not disconnecting customers who do not pay the utility bill (not shutting off utility service for non-payment). Which of the following best describes whether your household has paid utility bills during the COVID-19 pandemic?

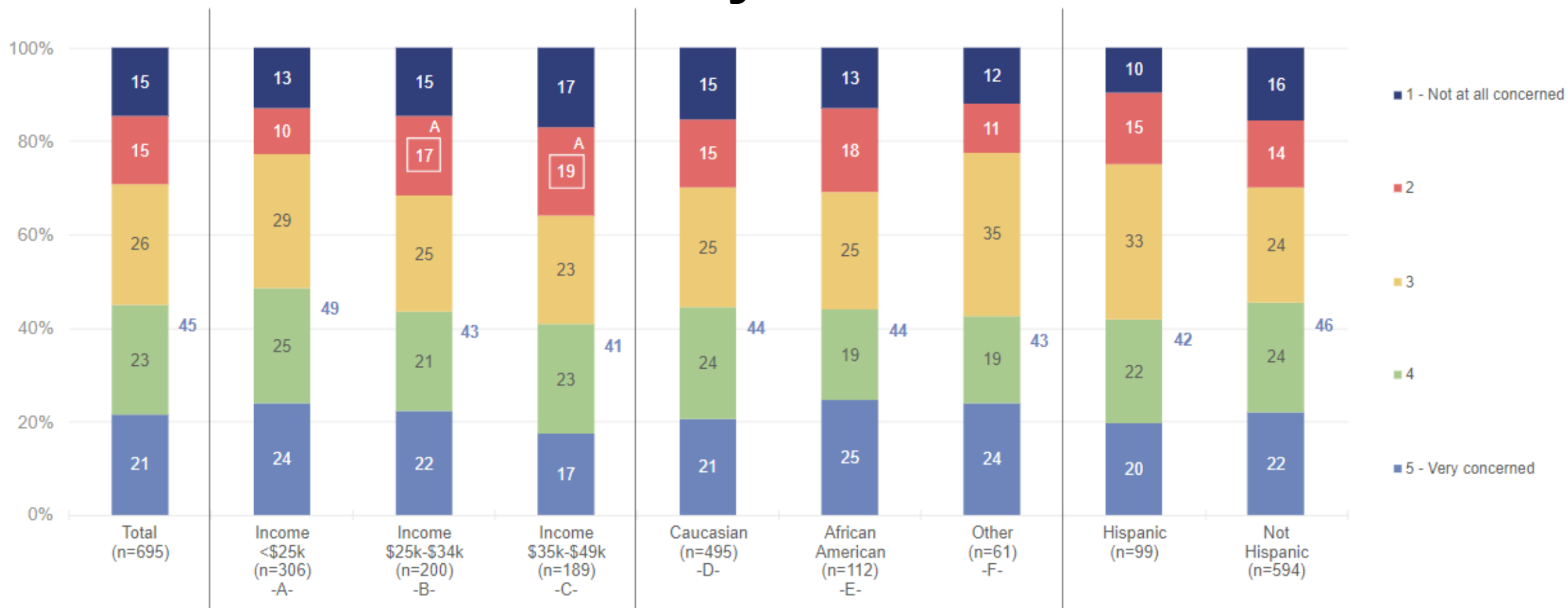
Household's Payment of Utility Bills During COVID-19 (Cont'd.)



Base: Total Respondents

H8. During the COVID-19 pandemic, nearly every electric, gas, and water utility has adopted a policy of not disconnecting customers who do not pay the utility bill (not shutting off utility service for non-payment). Which of the following best describes whether your household has paid utility bills during the COVID-19 pandemic?

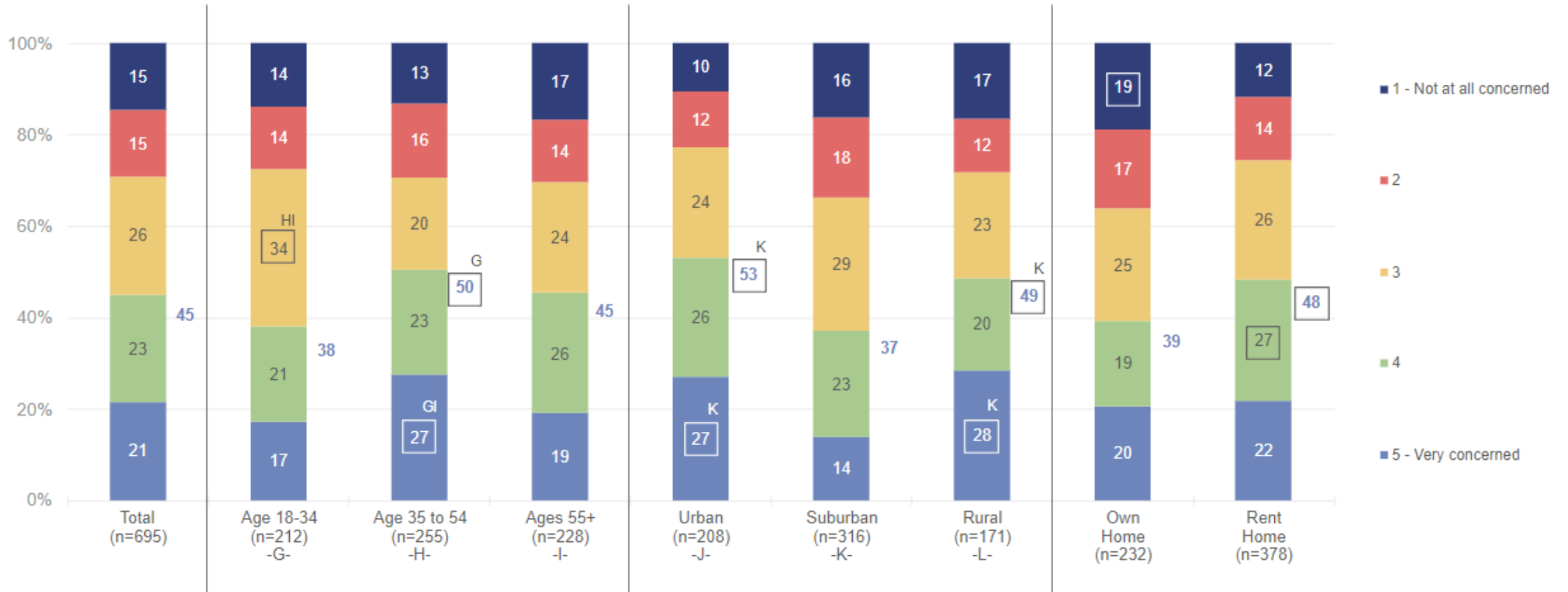
Concern Regarding Staying Current On Utility Bill Payments



Base: Total Respondents

H9. How concerned are you about your household's ability to stay current on utility bill payments over the next six months?

Concern Regarding Staying Current On Utility Bill Payments (Cont'd.)



Base: Total Respondents

H9. How concerned are you about your household's ability to stay current on utility bill payments over the next six months?



The Words Americans Prefer to Discuss Energy Programs

Strong preferences for “stable” vs. “predictable,” “clean” vs. both “green” and “renewable,” “climate change” vs. “global warming,” “manage” vs. “control,” and “community” vs. “local”

		Age		
	Total	18-34 -A-	35-54 -B-	55+ -C-
Total Respondents	(1018)	(317)	(408)	(327)
	%	%	%	%
Equity	25	27	23	25
Justice	29	34 _c	30 _c	23
Clean	34	36	33	34
Renewable	26	28	23	28
Green	22	27 _c	22	17
Clean	39	38	37	44
Stable	41	41	41	41
Predictable	14	14	15	12
Infrastructure	25	20	26	28 _A
Investment	34	39 _c	33	30

		Age		
	Total	18-34 -A-	35-54 -B-	55+ -C-
Total Respondents	(1052)	(317)	(408)	(327)
	%	%	%	%
Local	24	22	24	26
Community	34	36	36	31
Compassionate	26	25	27	25
Caring	28	30	27	28
Discount	25	28	25	22
Incentive	32	29	34	33
Sustainable	29	31	30	26
Renewable	31	29	31	33
Control	23	26 _c	24	19
Manage	34	35	32	36
Climate Change	36	35	37	37
Global Warming	19	23 _c	18	16

C5. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (Scale in a range of 1-7. Top 2 displayed here.)

Use of “Equity” vs. “Justice” to Discuss Energy Programs

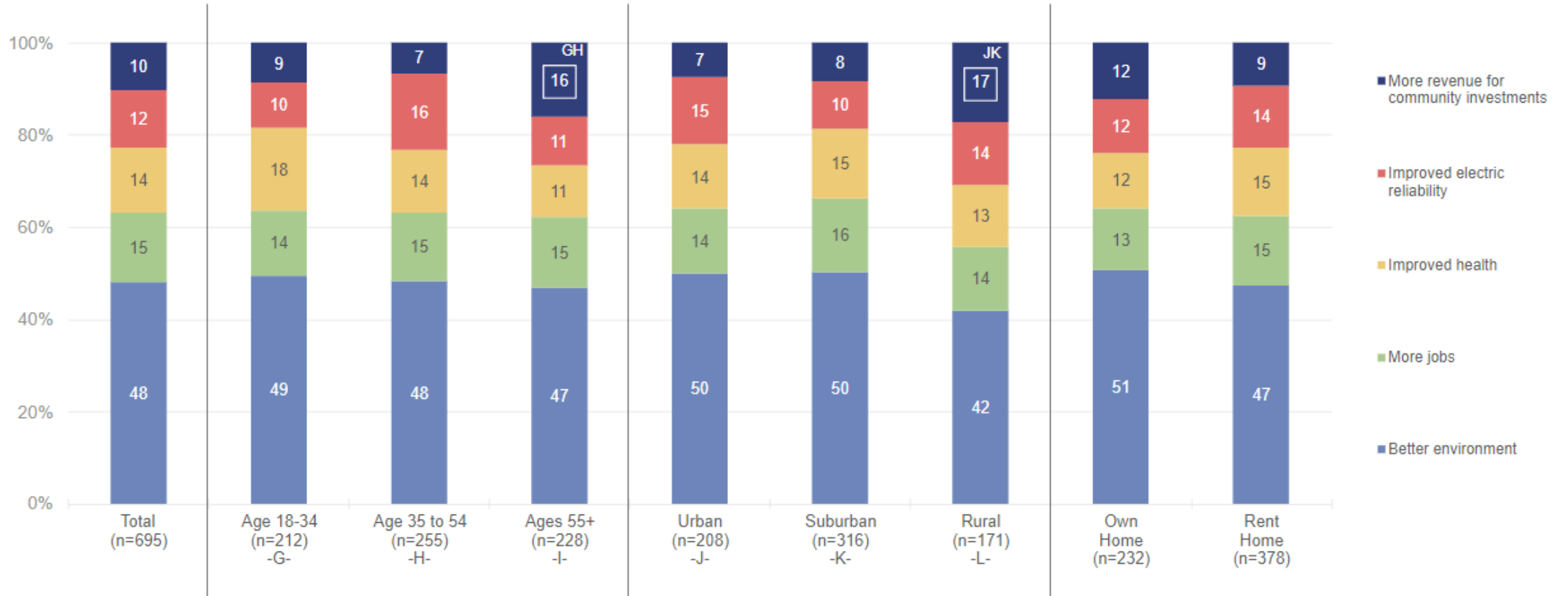
Those under 55 years, African Americans, and Hispanics showed a stronger preference for the word “justice”

		Age			Household Income			
	Total	18-34 -A-	35-54 -B-	55+ -C-	Under \$25k -D-	\$25k - \$49k -E-	\$50k - \$99k -F-	\$100k+ -G-
Total Respondents	(1052)	(317)	(408)	(327)	(288)	(253)	(277)	(195)
	%	%	%	%	%	%	%	%
Equity	25	27	23	25	21	25	31 ^D	24
Justice	29	34 ^C	30 ^C	23	33 ^F	32	25	29

		Racial Subgroups			Ethnic Subgroups		Type of Community		
	Total	Caucasia n -H-	African American -I-	Other -J-	Hispanic -K-	Not Hispanic -L-	Urban -M-	Suburban -N-	Rural -O-
Total Respondents	(1052)	(746)	(157)	(102)	(163)	(881)	(306)	(506)	(240)
	%	%	%	%	%	%	%	%	%
Equity	25	25	29	24	15	27	26	25	24
Justice	29	27	36 ^H	27	41	27	35 ^N	27	26

C5. Please indicate which word you would be most comfortable using and understanding in the discussion of energy programs by selecting the box between each set of words that most closely indicates your level of comfort and understanding in using that word. The more comfortable you would be with a specific word, the closer the box you select should be to that option. (Scale in a range of 1-7. Top 2 displayed here.)

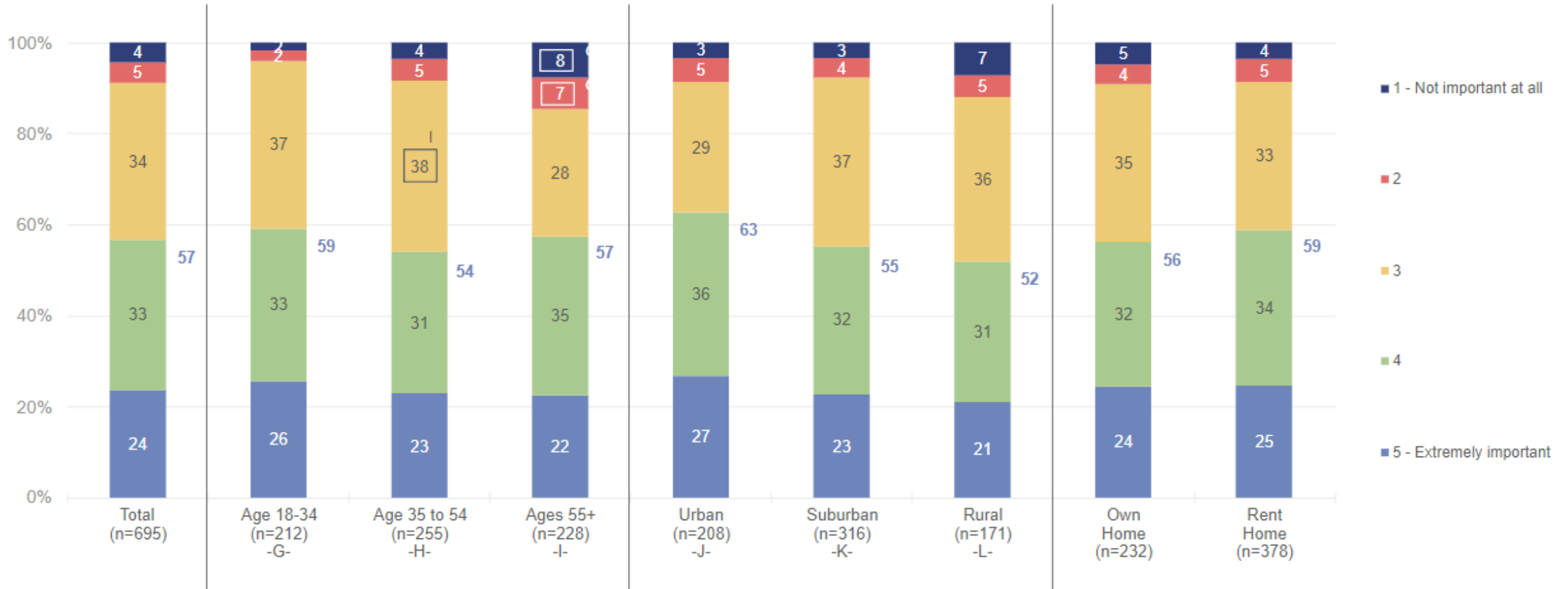
Top Benefit To Community From Clean Energy Investments (Cont'd.)



Base: Total Respondents
 H2. What do you think will be the top benefit your community will gain from clean energy investments?



Importance Of “Equity” (Cont’d.)

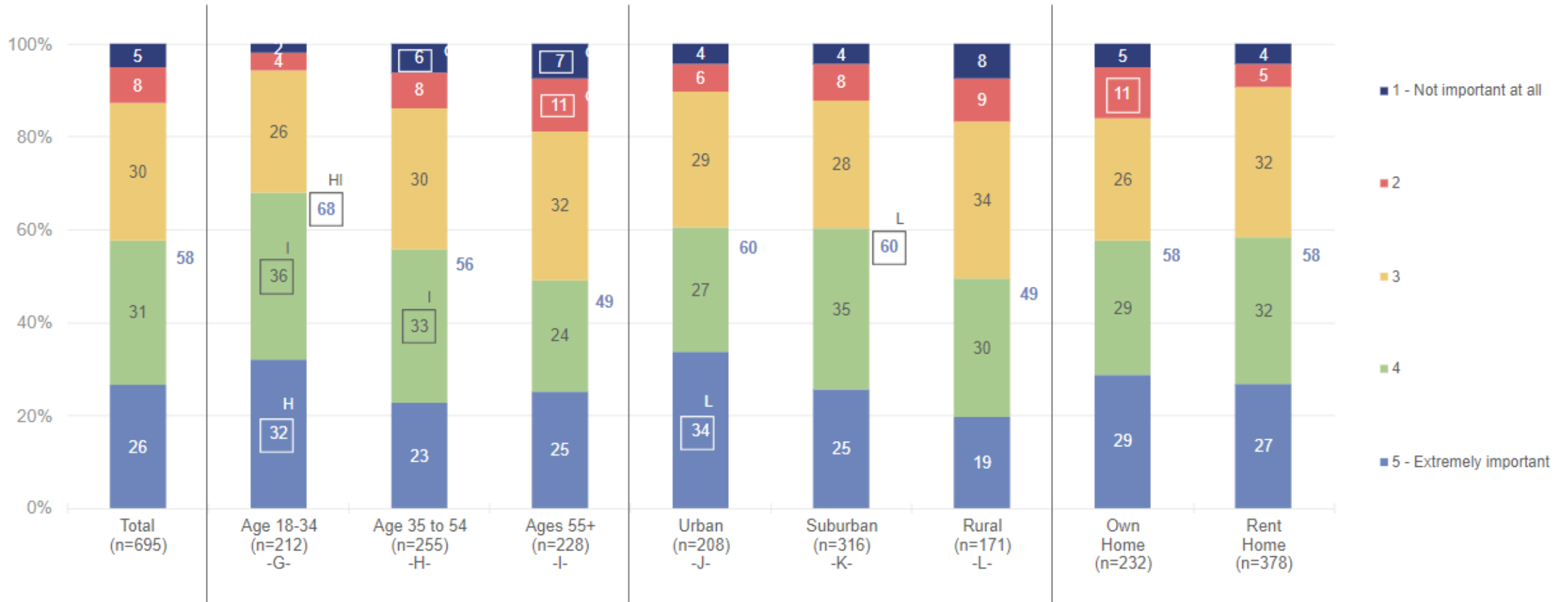


Base: Total Respondents

H3. There has been a lot of discussion of “equity.” Equity means different things to different people. On a scale of 1 to 5, where “1” is not important at all and “5” is extremely important, how important is “equity” to you personally?



Importance Of “Environmental Justice” (Cont’d.)



Base: Total Respondents

H4. There has been a lot of discussion of “environmental justice.” Environmental justice also means different things to different people. On a scale of 1 to 5, where “1” is not important at all and “5” is extremely important, how important is “environmental justice” to you personally?

Who Benefits From Focus On “Equity” and/or “Environmental Justice”

<u>Note:</u> Only includes individual mention of 3% or higher		Income			Race			Ethnicity	
	Total	Under \$25k -A-	\$25k - \$34k -B-	\$35k - \$49k -C-	Caucasian -D-	African American -E-	Other -F-	Hispanic	Not Hispanic
Total Respondents	(695)	(306)	(200)	(189)	(495)	(112)	(61)	(99)	(594)
	%	%	%	%	%	%	%	%	%
<u>Specific Groups Of People (Net)</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>33</u>	<u>30</u>	<u>47</u>	<u>39</u>	<u>39</u>	<u>33</u>
The people	11	13	11	9	11	16	10	14	11
Children/younger generations/future generations	5	4	9	4	6	3	7	4	5
The community	4	6	4	3	3	13	1	4	5
Minorities/low income/lower class	4	4	3	5	4	6	3	3	4
Everyone	27	24	30	29	29	21	22	25	27
<u>Environment (net)</u>	<u>14</u>	<u>10</u>	<u>16</u>	<u>17</u>	<u>14</u>	<u>9</u>	<u>13</u>	<u>11</u>	<u>14</u>
The planet/earth/mother nature/animals/wildlife	11	8	13	14	12	8	9	9	11
<u>Government/Federal/Municipal Related (net)</u>	<u>10</u>	<u>10</u>	<u>5</u>	<u>12</u>	<u>11</u>	<u>5</u>	<u>7</u>	<u>11</u>	<u>9</u>
The government	5	6	4	5	6	4	5	4	5
Politicians	3	3	-	7	4	1	2	5	3
<u>Companies/Businesses (net)</u>	<u>8</u>	<u>7</u>	<u>9</u>	<u>10</u>	<u>9</u>	<u>4</u>	<u>9</u>	<u>7</u>	<u>8</u>
Big businesses/companies/corporations	5	4	6	5	6	2	6	3	5
Don't know	10	12	10	8	10	10	8	14	9
No answer	7	7	7	7	6	7	10	8	7

- H5. From your perspective, who benefits from a focus on equity and/or environmental justice?

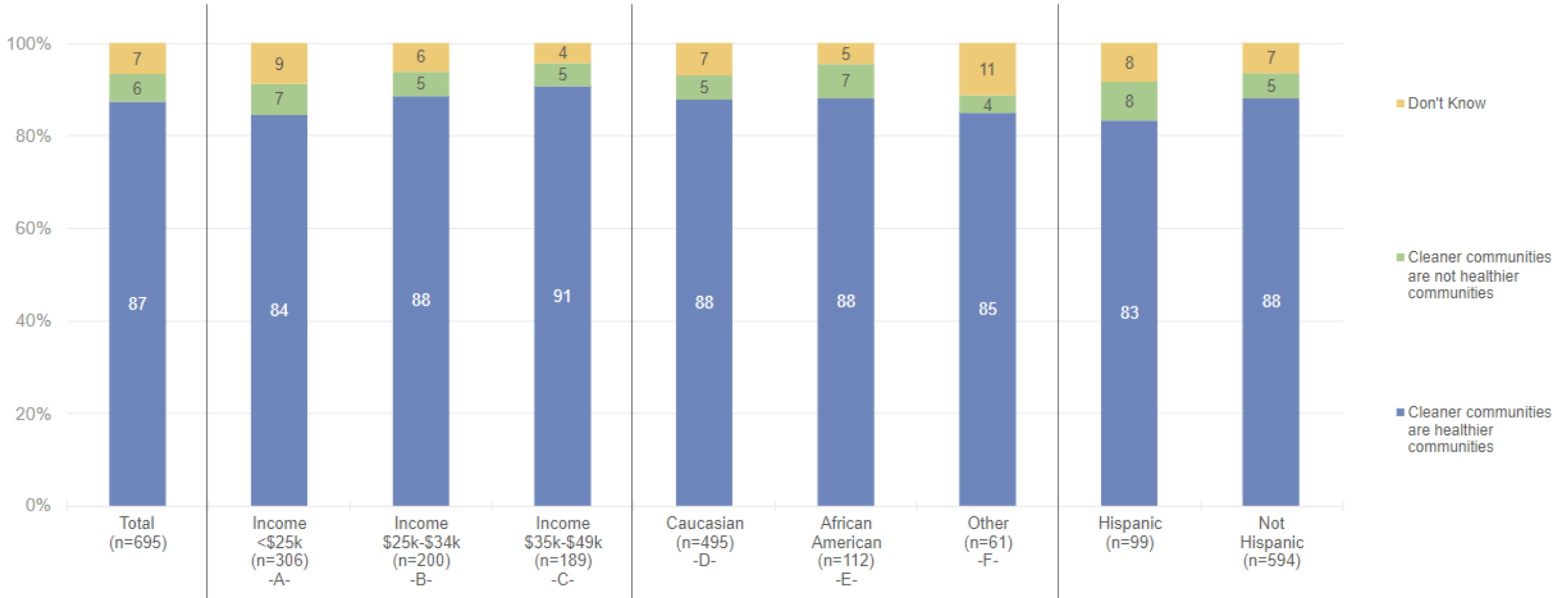
Who Benefits From Focus On “Equity” and/or “Environmental Justice” (Cont’d.)

<u>Note:</u> Only includes individual mention of 3% or higher		Age			Type of Community			Home Ownership	
	Total	18-34 -G-	35-54 -H-	55 or Older -I-	Urban -J-	Suburban -K-	Rural -L-	Own	Rent
	(695)	(212)	(255)	(228)	(208)	(316)	(171)	(232)	(378)
	%	%	%	%	%	%	%	%	%
<u>Specific Groups Of People (Net)</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>33</u>	<u>34</u>	<u>35</u>	<u>31</u>	<u>35</u>	<u>33</u>
The people	11	10	12	12	13	12	9	15	10
Children/younger generations/future generations	5	4	7	4	3	5	8	5	5
The community	4	6	4	3	6	3	5	5	5
Minorities/low income/lower class	4	3	3	6	5	5	3	5	4
Everyone	27	28	28	25	26	29	25	25	28
<u>Environment (net)</u>	<u>14</u>	<u>16</u>	<u>15</u>	<u>10</u>	<u>13</u>	<u>14</u>	<u>13</u>	<u>14</u>	<u>12</u>
The planet/earth/mother nature/animals/wildlife	11	14	11	8	10	11	12	11	9
<u>Government/Federal/Municipal Related (net)</u>	<u>10</u>	<u>8</u>	<u>7</u>	<u>14</u>	<u>6</u>	<u>10</u>	<u>13</u>	<u>11</u>	<u>9</u>
The government	5	5	4	7	2	6	9	8	4
Politicians	3	2	3	6	3	4	3	2	4
<u>Companies/Businesses (net)</u>	<u>8</u>	<u>3</u>	<u>10</u>	<u>12</u>	<u>10</u>	<u>7</u>	<u>9</u>	<u>10</u>	<u>7</u>
Big businesses/companies/corporations	5	2	7	5	6	5	5	6	4
Don't know	10	9	10	11	12	9	8	7	12
No answer	7	10	5	6	4	7	10	9	5

Top 2 Priorities for Local Community (Cont'd.)

		Age			Type of Community			Home Ownership	
	Total	18-34 -G-	35-54 -H-	55 or Older -I-	Urban -J-	Suburban -K-	Rural -L-	Own	Rent
Total Respondents	(695)	(212)	(255)	(228)	(208)	(316)	(171)	(232)	(378)
	%	%	%	%	%	%	%	%	%
Food and groceries	43	40	43	48	48	41	43	42	45
Air and water quality	41	42	35	48 ^H	39	41	44	50	37
Health services	38	39	39	36	33	40	40	36	39
Jobs	37	42 ^I	45 ^I	22	42	34	38	34	38
Policing and safety	31	26	30	39 ^G	29	35	27	34	29
Public transportation	9	12	8	7	9	9	9	4	11

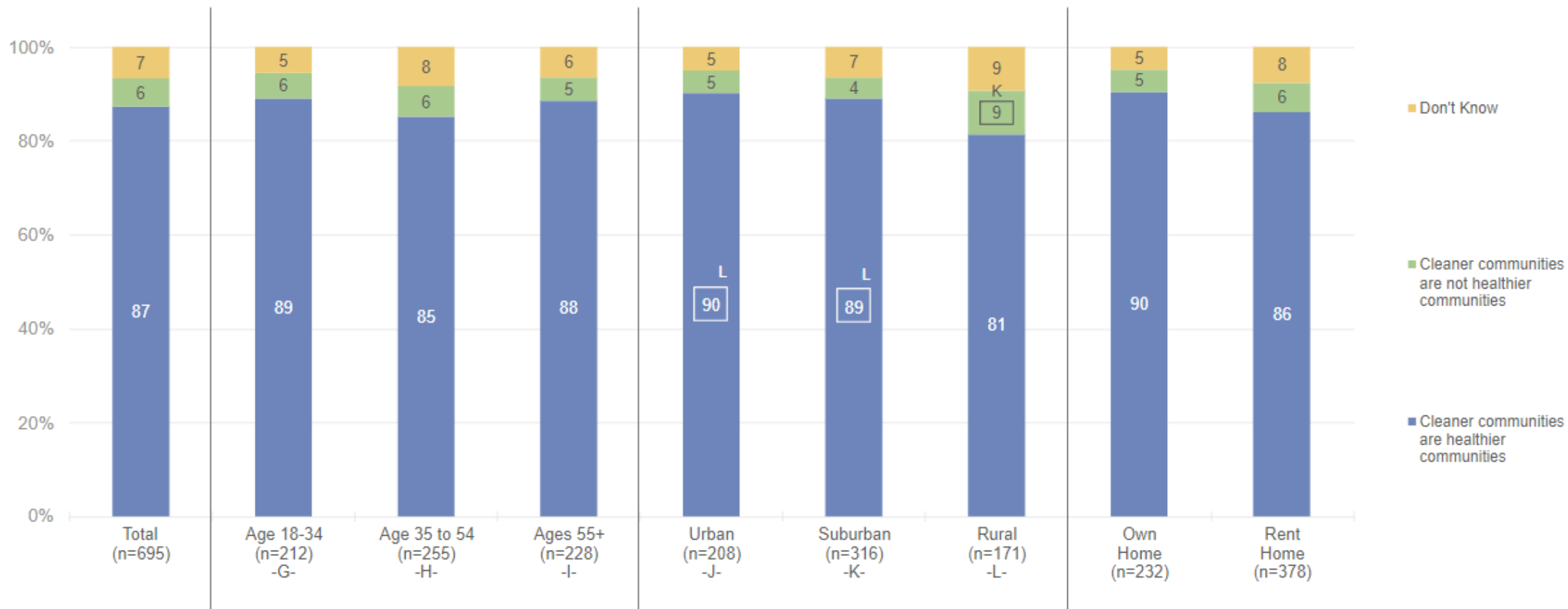
Cleaner Communities are Healthier Communities



Base: Total Respondents

H7. Do you believe that cleaner communities are healthier communities?

Cleaner Communities are Healthier Communities (Cont'd.)

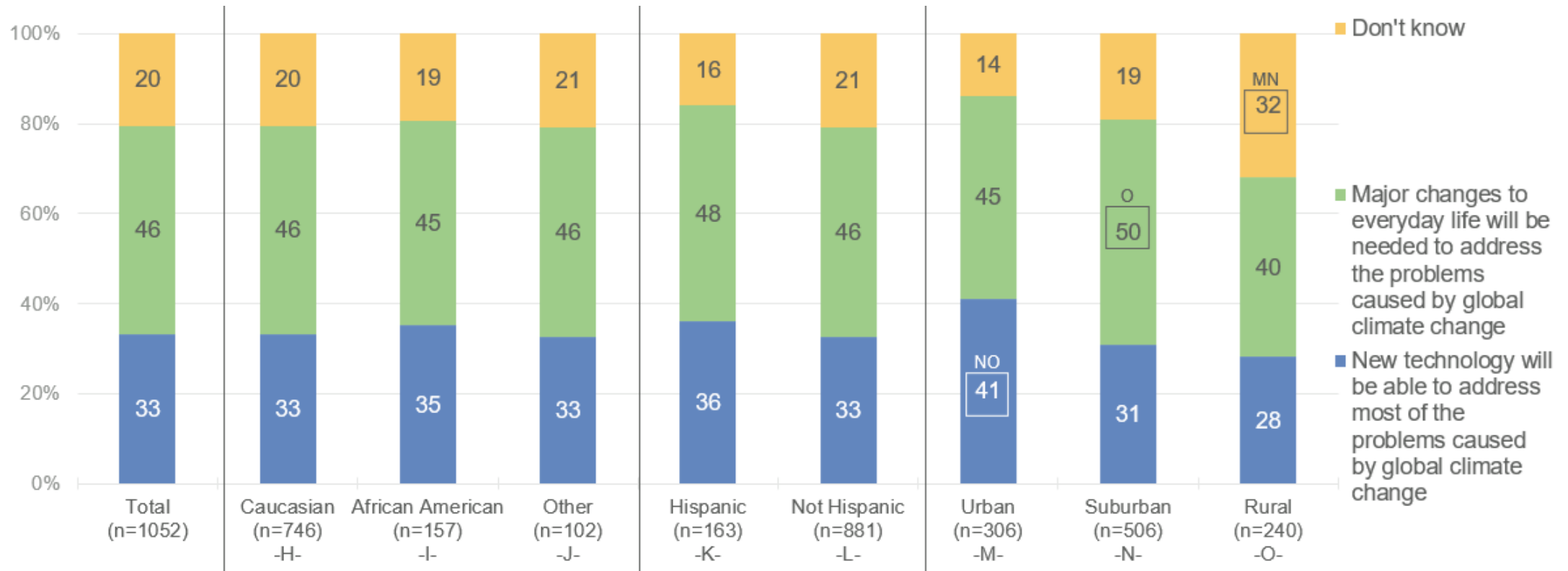


Base: Total Respondents

H7. Do you believe that cleaner communities are healthier communities?

Nearly Half Believe that Major Changes to Everyday Life will be Needed to Address Climate Change (continued)

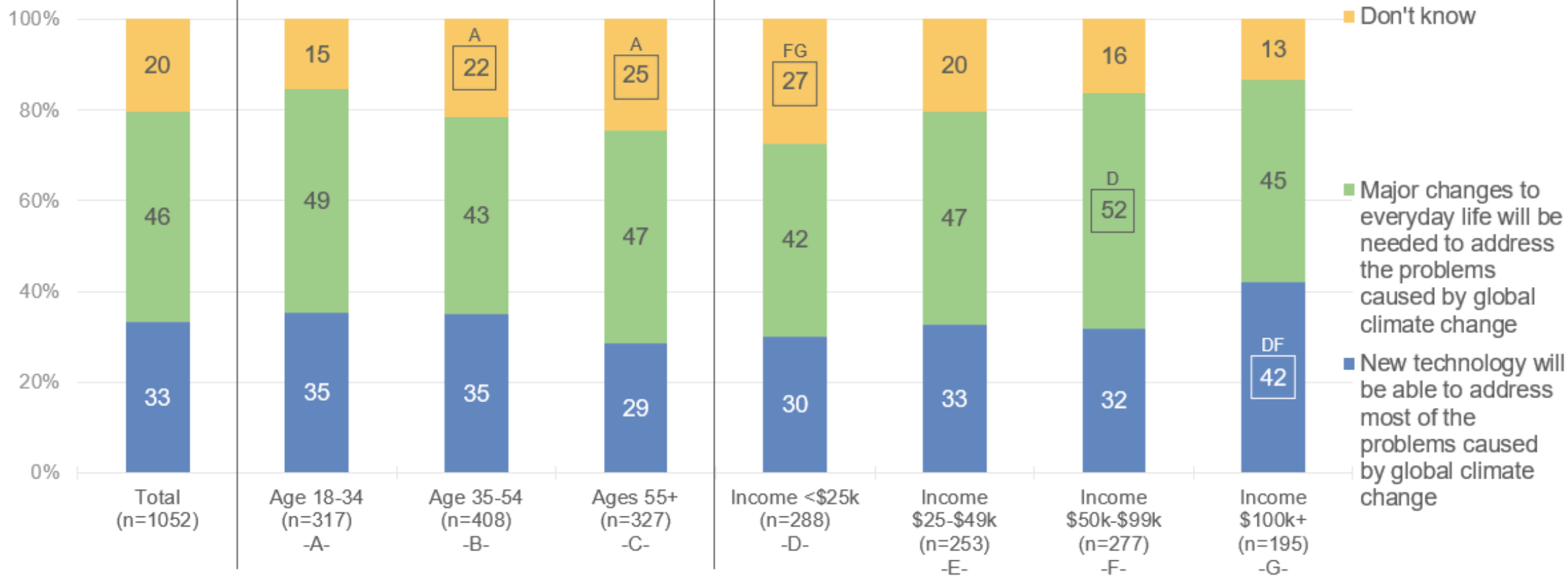
Those who live in urban centers are the most likely to believe that technology will be the answer



Base: Total Respondents C13. Looking to the future 50 years from now, which of the following do you think is more likely to happen in the U.S.?

Nearly Half Believe that Major Changes to Everyday Life will be Needed to Address Climate Change

Those with the highest incomes are the most likely to believe that technology will be the answer



Base: Total Respondents C13. Looking to the future 50 years from now, which of the following do you think is more likely to happen in the U.S.?

DEFG

Customer Insights & Advisory Firm

An **E Source** Company

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DEFG, An E Source Company, is a customer insights and advisory firm in the utility space. Through collaborative research, data analysis and peer-to-peer networking, we help our clients achieve ways to better serve their customers.



EQUITY IN A
CLEAN ENERGY
ECONOMY